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**The Benefits of Advertising Status:  
What Conspicuous Consumption Buys Women**

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**The Benefits of Advertising Status:  
What Conspicuous Consumption Buys Women**

**by**

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**Dissertation**

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# **The Benefits of Advertising Status: What Conspicuous Consumption Buys Women**

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The primary objectives of the current research were to (1) test the effectiveness of conspicuous consumption as a status-enhancement tactic and (2) examine access to material resources as an interpersonal benefit that incentivizes status striving behavior. The studies that follow investigated the status striving motivations of both men and women; however, this research endeavor was primarily designed to address the paucity of research on female status. In Study 1, a nation-wide sample of participants perceived target women to be higher status when they were depicted conspicuously consuming than when not. Several individual difference variables that predict conspicuous consumption were also identified, many of which related to the attainment of high status. In Studies 2 and 3, conspicuous consumption was shown to increase perceptions of status in face-to-face interactions, further supporting the status signaling function of conspicuous consumption. Study 3 utilized a Dictator Game methodology to test the prediction that participants would share more of a monetary allotment with confederates who were conspicuously consuming than with those who were not. Results indicated that conspicuous consumption did not increase generosity except in male participants who shared more of a monetary allotment with conspicuous consumers, particularly those of the same sex. This sex-specific result is discussed in light of the possibility that

conspicuous consumption signals a type of status that is particularly relevant to men (i.e., economic status). In conclusion, I consider the different pathways by which high status individuals receive increased access to resources.

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## Chapter 1: Status

Upon reflecting on the evolutionary paradox of fashion in his seminal book, Matt Ridley (1993) concedes that the puzzle of why women follow fashions more avidly than men is currently unsolvable. “Fashion is about status,” Ridley states, “and yet the sex that is obsessed with fashion is trying to impress the sex that cares least about status (p. 304).” The assumption underlying this evolutionary paradox—that women advertise status as a mate attraction tactic—ignores the impact of intrasexual (i.e., same-sex) competition on women’s desire to be fashionable. The studies that follow are the first to investigate women’s status striving from a perspective other than mate attraction. Rather than trying to impress the sex that cares *least* about status, women proclaim their social standing to exert influence over those who care *most* about status—other women.

### STATUS BENEFITS

The dependency of humans on social interaction is matched by no other species in history (Baumeister & Leary, 1995). Over human evolution, combatting the hostile forces of nature (e.g., food shortages, predators) required a cooperative network of kith and kin. As psychological adaptations designed to contend with complex social networks evolved, humans acquired the social cognition necessary to dominate their ecology (e.g., through cooperative hunting; Flinn, Geary, & Ward, 2005). Paradoxically, having acquired dominance over their ecology, the relative intensity of selection pressure shifted away from extrinsic factors toward those involving conspecifics; humans had become their own “principle hostile force of nature” (Alexander, 1989, p. 458) via inter- and intragroup competition (Flinn, Geary, & Ward, 2005).

In all known human societies, dominance hierarchies result from individual interests to avoid the unnecessary expenditure of time, energy, and resources in contests

with other humans (Buss, 2004). By acquiescing to those more formidable, subordinate individuals prevent the risk of injury and reputational damage that result from losing a competition, which concomitantly spares dominant individuals the cost of engaging in continual combat to defend their rank. Thus, stable dominance hierarchies emerge from each individual's assessment of the probabilistic outcomes of social conflict. Once formed, hierarchical relationships are processed and remembered more easily than other types of relationships (Zitek & Tiedens, 2012), as are the faces of high ranking relative to low ranking individuals (Ratcliff, Hugenberg, Shriver, & Bernstein, 2011), increasing the stability of social hierarchies.

The resultant “pecking order” generates tremendous interpersonal benefits for high-ranking—i.e., high status—individuals who, as a consequence of their status, are viewed as more competent (Anderson & Kilduff, 2009) and have greater influence over group decision making (Berger, Cohen, & Zelditch, 1972) than others; and elicit greater conformity (Larsen, Triplett, Brant, & Langenberg, 1979), compliance (Faley & Tedeschi, 1971; Nelissen & Meijers, 2011), and honesty (Bickman, 1971) from others. High status individuals are less subject to social regulation as others are less likely to look for (Cummins, 1999), remember the faces of (Mealey, Daood, & Krage, 2006), and punish (Eckel, Fatas, & Wilson, 2010) high status norm violators, despite the fact that high-ranking individuals more frequently disregard societal conventions (Kraus & Keltner, 2009; Van Kleef et al., 2011). Particularly relevant to the current set of studies, privileges accorded to high status individuals also include priority in access to resources (Cummins, 2006; Nelissen & Meijers, 2011), such as food, living space, and the assistance of others (e.g., grooming; Henrich & Gil-White, 2001; Van der Vegt, Bunderson, & Oosterhof, 2006). In sum, these benefits facilitate high status individuals' ability to realize self-serving goals (Cosmides & Tooby, 1992; Cummins, 1999).

In addition to these interpersonal benefits, high status individuals enjoy health advantages that are both physical (e.g., decreased disease susceptibility; Cohen et al., 2008) and psychological (e.g., decreased stress; Adler, Epel, Castellazzo, & Ickovics, 2000), and remain after controlling for objective measures of socioeconomic status. The pathway between social status and health has been demonstrated in experimental (Mendelson, Thurston, & Kubzansky, 2008) and correlational analyses across a diverse array of populations that range from elementary-aged children (Boyce, 2004) to pregnant women (Ostrove, Adler, Kuppermann, & Washington, 2000).

### **Status Benefits in Men**

The aforementioned status benefits contribute to the solutions of sex-specific adaptive problems. In men, a large class of status benefits—those that relate to resource accrual—appertain to the adaptive problem of mate attraction. In their evaluation of partner suitability, women scrutinize the resource holdings of men as an indication of future paternal investment. Women are especially attentive to indices of status at ovulation, suggesting that resource display may also be an indication of high quality genes in men (Lens, Driesmans, Pandelaere, & Janssens, 2012). Ambitious men with good financial prospects are strongly preferred by women cross-culturally (Buss, 1989) and women are generally more selective than men with regard to a partner's earning capacity (Li, Bailey, Kenrick, & Linsenmeier, 2002) for both short- and long-term mating relationships (Kenrick, Sadalla, Groth, & Trost, 1990). In addition, research has shown attractive women (i.e., women with low waist-to-hip ratios) to be more demanding for resourcefulness in a potential long-term mate than less attractive women (Pawlowski & Jasienska, 2008). Consequently, men broadcast their available resources and skill at acquiring wealth in status competitions with one another. Men with higher status obtain

greater mating opportunities (Chagnon, 1992; Hill & Hurtado, 1996) as they provide women with access to the resources they so desire.

### **Status Benefits in Women**

Relatively little research has explored status benefits among women; however, there is good reason to suspect that like men, women stand to realize significant reproductive benefits as a consequence of being high status. The interpersonal benefits described above (e.g., priority in access to resources) are especially valuable to women, relative to men, as women are less able to deploy formidability as a means of pursuing self-interested goals. The reason for this is two-fold: (1) men have 61% more muscle mass than women, translating into a 90% increase in upper body strength (Lassek & Gaulin, 2009), enabling them to more effectively use threats of physical harm to manipulate their social environment; and (2) injuries that result from physical aggression more strongly affect offspring survival when inflicted upon women than upon men, as women invest relatively more parental effort than men (Trivers, 1972). Consequently, women must navigate their social environment judiciously, using relational, rather than physical aggression to protect the primary caretaker of their children—themselves (Campbell, 1999).

### **THE CURRENT STUDIES**

The primary objective of the studies below was to begin identifying the interpersonal benefits that motivate women's status striving from a functional, evolutionary perspective. A secondary objective was to test the effectiveness of conspicuous consumption as a status-enhancement tactic.

Study 1 utilized a nation-wide survey to assess the prevalence of conspicuous consumption, as well as the individual difference variables that predict conspicuous

consumption, in men and women. Importantly, Study 1 also provided a preliminary test of the effectiveness of conspicuous consumption as a status-enhancement tactic. The primary purpose of Study 2 was to replicate the Study 1 finding that conspicuous consumption increases perceptions of status in face-to-face interactions in a fully cross-sexed design. Finally, I used a Dictator Game methodology in Study 3 to test the existence of one interpersonal benefit associated with status—access to resources—in both men and women. In Study 3, conspicuous consumption served as the status manipulation in accordance with the findings of Studies 1 and 2. Following the description of Study 3, a domain-general concept of status of challenged in consideration of the various pathways by which high status individuals receive increased access to resources.

## Chapter 2: Conspicuous Consumption

Veblen (1899/1994) introduced the concept of conspicuous consumption—the act of spending lavishly for the specific purpose of displaying one’s wealth—at a time when middle-market customers could only dream of affording a lifestyle characteristic of the economically elite. Fast-forward 100 years and even average Americans are purchasing luxury goods at unprecedented rates (Silverstein & Fiske, 2003). Luxury goods conglomerate, *Moët Hennessy • Louis Vuitton* (LVMH Group), possessing a portfolio of over 60 brands, including Louis Vuitton, Givenchy, and Dom Pérignon, reported net profits of \$2.51 billion in 2009, a 285% increase from their net profit of \$880 million only ten years prior. The luxury market boom is also reflected in the annual sales of LVMH Group competitors, *Compagnie Financière Richemont*, reporting \$6.88 billion in 2009, and *Pinault-Printemps-Redoute*, reporting \$4.30 billion in 2009 from their Gucci Group alone. As noted by Bernard Arnault, chairman and CEO of LVMH Group, “Luxury goods are the only area in which it is possible to make luxury margins.”

### HONEST DISPLAYS OF WEALTH

Consumerism, generating rampant levels of financial debt and environmental degradation, has flourished in spite of mounting evidence that materialistic purchases bring less happiness than experiential purchases (e.g., vacations; Kasser, 2002; Van Boven, 2005). People adapt more quickly to materialistic goods (Nicolao, Irwin, & Goodman, 2009), in part due to the upward social comparison inherent in such purchases (Carter & Gilovich, 2010). Aside from the costs associated with an ever-steeper hedonic treadmill, materialistic individuals are liked less than non-materialistic individuals (Van Boven, Campbell, & Gilovich, 2010). It is precisely the costliness of materialism, however, that motivates individuals to pursue this avenue of self-expression.



Conspicuous consumption has received particular empirical attention (e.g., Griskevicius et al., 2007; Nelissen & Meijers, 2011) within the framework of costly signaling theory (Zahavi, 1975). Within this framework, luxury goods function as “honest” signals of an individual’s social and economic status, as evidenced by their costliness and exclusivity; only the wealthiest of individuals can afford a genuine Chanel handbag or Rolex watch. Furthermore, customers get less “bang for their buck” when purchasing luxury goods as companies inflate sale prices well beyond the absolute manufacturing costs. Luxury market customers, therefore, pay more for a product than its material worth, rendering the purchase an even more honest signal of the buyers’ wealth. Thus, designer apparel and other extravagances, such as luxury cars, function as honest indices of status to the extent that they are attainable only by those in a superior economic position (but see research on deceptive status signaling and counterfeit luxury products; Van Kempen, 2003).

### **THE POSITIONAL BIAS**

In the domain of status competition, satisfaction with material possessions is not dependent on the absolute value of a good, but rather on the relative value of how much one has compared to others—a positional bias (Hill & Buss, 2006). Life satisfaction, for example, is better predicted by how an individual’s income ranks amongst others’ than it is by the absolute value of his or her income (Boyce, Brown, & Moore, 2010). Individuals who judge their resource holdings with respect to the resource holdings of their competitors continually strive to improve their position, regardless of their standing in absolute terms (Hill & Buss, 2006). The positional bias is especially strong for upward social comparisons (i.e., comparisons with those who are superior in a given domain; Andersson, 2008; Boyce, Brown, & Moore, 2010) and for publically consumed goods

(e.g., cars; Frank, 1999). When choosing between a publically observable product that has either (1) an absolutely smaller, but larger value relative to others' (e.g., you own a \$25,000 car and your peers own \$10,000 cars) or (2) an absolutely larger, but smaller value relative to others' (e.g., you own a \$30,000 car and your peers own \$45,000 cars), men and women more frequently select the former. This pattern is reversed for privately consumed goods (e.g., insurance plans), with men and women sacrificing relative value for greater absolute value (Alpizar, Carlsson, & Johansson-Stenman, 2005), as the relative position of oneself and others cannot be judged.

### **RESOURCE DISPLAY IN THE MODERN ENVIRONMENT**

Although luxury products are evolutionarily novel, their signaling value is the product of evolved psychological mechanisms designed to respond to cues that were recurrently associated with high status individuals across human evolutionary history. Such cues include the possession of goods that are so costly to obtain or scarce that only individuals with exceptional means can secure them. Marketing firms strategically exploit our evolved psychology by publicizing luxury products in the possession of those whom their target market recognizes as high status (e.g., celebrities). The status that is associated with the individuals who own luxury products is transferred to the products themselves, as well as the products' brand reputations. Interestingly, several researchers have noted a greater prevalence of conspicuous consumption in urban areas where characteristics typically indicative of an individual's social status (e.g., occupation) are not widely known (Chao & Schor, 1998; Heaney, Goldsmith, & Jusoh, 2005).

### **Resource Display in Men**

Consistent with women's evolved preference for resourcefulness in a potential mate (Buss, 1989), an expansive body of research indicates that mating opportunities

activate motivational mechanisms in men to acquire and display resources. For instance, men report greater ambition and a stronger desire to earn money when in the presence of an attractive woman (Roney, 2003). Research has also shown that viewing attractive women causes men to become more economically impulsive (Wilson & Daly, 2004), as does merely touching a woman's brassiere (Van den Bergh, Dewitte, & Warlop, 2008). Viewing attractive women also causes men (especially men with an unrestricted sociosexual orientation; Sundie, Kenrick, Griskevicius, & Tybur, 2011) to spend money more conspicuously (Griskevicius et al., 2007). Recently, Griskevicius et al. (2012) explored men's resource display as a function of population sex ratio, showing that men living in male-biased U.S. cities carry a greater number of credit cards and more debt than men living in relatively sex-balanced or female-biased cities. Moreover, experimentally increasing the sex ratio caused men to report a decreased desire to save money and an increased willingness to incur debt; bringing into stark relief the measures men take to reduce the probability that they will be consigned to bachelorhood (Symons, 1979). Finally, endocrine responses associated with mating effort (i.e., increased testosterone; Roney, Mahler, & Maestripieri, 2003) have been evidenced in men engaging in resource display (e.g., driving a sports car; Saad & Vongas, 2009), thereby facilitating the realization of possible mating opportunities that follow. Taken together, these studies provide robust evidence that mate attraction is a primary function of men's conspicuous consumption.

### **Resource Display in Women**

Given the relationship between resource display and mate attraction in men, researchers reason that men are more strongly motivated to conspicuously consume than women (e.g., Miller, 2009). For example, Griskevicius et al. (2007) state, "Research on

human mate choice...suggests that the conspicuous display of resources ought to be used more frequently by men than women because women place considerably more emphasis on cues of wealth and status when selecting a romantic partner” (p. 87). Women are indeed more stringent than men in their evaluation of a partner’s wealth and status (Buss, 1989), but that does not preclude women from engaging in resource display at least as much as men. Women fuel the luxury market; 80% of luxury fashion goods are purchased by women (Okonkwo, 2007). I propose that like men, women are strongly motivated to conspicuously consume; however, the functions of conspicuous consumption differ in a sex-specific manner. Whereas men conspicuously consume in the service of mate attraction, women conspicuously consume to increase perceptions of their status, which in turn generates interpersonal benefits that aid in childcare (e.g., access to resources) and the navigation of complex social networks (e.g., reputational control).

Although little empirical work has been conducted on female status, research on women’s conspicuous consumption has thus far been consistent with a status signaling explanation. Women are more envious than men of the status of same-sex rivals (Saad, 2005; true in particular domains more so than others) and women prefer more ostentatious brands of makeup (e.g., Chanel) for products that are applied in public (e.g., lipstick) than in private (e.g., skin care; Chao & Schor, 1998). In a native Amazonian society, Godoy and colleagues (2007) showed that women’s spending increases with product visibility, and concluded that women, more so than men, use conspicuous consumption to signal social status. Although a coherent picture of women’s status signaling is beginning to emerge, this area of study remains a relatively untapped niche in need of empirical work.

## **STUDY 1: CONSPICUOUS CONSUMPTION SURVEY**

The primary purpose of Study 1 was to assess the effectiveness of conspicuous consumption as a status-enhancement tactic. Of particular interest was the degree to which conspicuous consumption influenced perceptions of women's status, consistent with the overarching goal of this research program to identify women's motivations to conspicuously consume. I also sought to ascertain the prevalence of conspicuous consumption, as well as the individual difference variables that predict conspicuous consumption, in both men and women. The final objective of Study 1 was to determine the sex that men and women most frequently target with their conspicuous consumption.

### **Predictions**

*Prediction 1.1: Photographed women will be perceived as higher status when carrying an expensive, designer handbag than an inexpensive, generic handbag.* In Western societies, status is strongly influenced by economic power (i.e., wealth; Gilbert, 1998). Because the ownership of costly material possessions provides evidence of economic power, conspicuous consumption is expected to increase perceptions of status (Frank, 1999; Veblen, 1899).

*Prediction 1.2: Individual difference variables related to status will positively correlate with behavioral and attitudinal measures of conspicuous consumption.* As objective social status (i.e., socioeconomic status; hereafter referred to as SES) and subjective social status (i.e., popularity) increase, participants are expected to engage in status signaling through conspicuous consumption with increased frequency. In addition, those who strive to attain a high level of status (measured using the Status Concern Scale), regardless of their actual status standing, will use conspicuous consumption with increased frequency to purport their economic power.

Social Dominance Orientation (SDO), a preference for hierarchical organization in groups, is another status-related construct that is expected to predict conspicuous consumption. Research has identified status as a determinant of SDO (Sidanius, Levin, & Pratto, 1996). High status individuals receive greater benefits from hierarchical structures than low status individuals, and are therefore, more likely to endorse them. To the extent that conspicuous consumption is more frequent among high status individuals, it should also correlate positively with SDO.

*Prediction 1.3: Individual differences in narcissism, particularly within the exploitation/entitlement (E/E) facet, will positively correlate with behavioral and attitudinal measures of conspicuous consumption.* Research has shown that narcissistic individuals, particularly those who score highly on the E/E facet, are more popular at first sight than less narcissistic individuals (Back, Schmukle, & Egloff, 2010). As found by Back, Schmukle, and Egloff (2010), this effect was entirely driven by the flashiness of attire worn by E/E narcissists. These findings are consistent with the notion that Machiavellian-type individuals wear flashy, conspicuous attire to increase their likeability, which in turn facilitates their ability to take advantage of others. In partial replication of this effect, greater narcissism, particularly with regard to the E/E facet, was expected to be associated with more frequent conspicuous consumption.

*Prediction 1.4: Male and female participants will report trying to impress women more frequently than men in their conspicuous consumption.* The motivations that underlie this focus on women are sex-specific; men do so to attract potential mates, whereas women do so to elicit interpersonal benefits from those who constitute their social networks—other women.

## **Method**

### ***Participants***

The sample consisted of 176 men and 227 women, all of whom passed a one-question instructional compliance check (see Appendix A) embedded in the survey measures below. Participants' ages ranged from 18 to 77 ( $M = 31.74$ ,  $SD = 11.84$ ). Approximately 60% of participants ( $N = 242$ ) were currently involved in a committed romantic relationship. As part of a series of questions assessing participants' SES, 8.68% ( $N = 35$ ) of participants classified their family of origin as lower class, 22.83% ( $N = 92$ ) as lower-middle class, 42.93% ( $N = 173$ ) as middle class, 24.07% ( $N = 97$ ) as upper-middle class, and 1.49% ( $N = 6$ ) as upper class.

This nation-wide sample of participants was recruited using Amazon's Mechanical Turk, an online marketplace where community members complete menial online tasks (e.g., survey completion) in exchange for a small payment (usually less than \$1.00). Despite its limitations, including self-selection bias and the impossibility of recruiting people who do not have access to the internet, Mechanical Turk samples are more demographically diverse than college samples and produce data that is as reliable as data collected using traditional offline methodologies (Buhrmester, Kwang, & Gosling, 2011). Study 1 participants were offered \$0.50 in exchange for completing the battery of survey measures below.

### ***Materials and Procedure***

Participants began the battery of survey measures by providing demographic information that included the MacArthur Scale of Subjective Social Status (Adler, Epel, Castellazzo, & Ickovics, 2000) and several questions related to participants' socioeconomic status (e.g., self-reported social class; self and parental levels of income,

occupation, and education). Participants also completed the Sociosexual Orientation Inventory-Revised (SOI-R; Penke & Asendorpf, 2008), a 9-item measure of individual differences in attitudes, desires, and behaviors relating to casual sex.

Participants were then shown a photograph of one of five college-aged female research confederates carrying a handbag. The print on the handbag was digitally manipulated so that the original Louis Vuitton print was either present or absent (see Illustration 1). Participants were randomly assigned to view one of the two renderings and were asked, “Relative to other women of a similar age, how high status is this woman?” Participants responded on a 1 (much lower status than other women) to 7 (much higher status than other women) Likert scale.



### Illustration 1: Photograph Manipulation Task Example



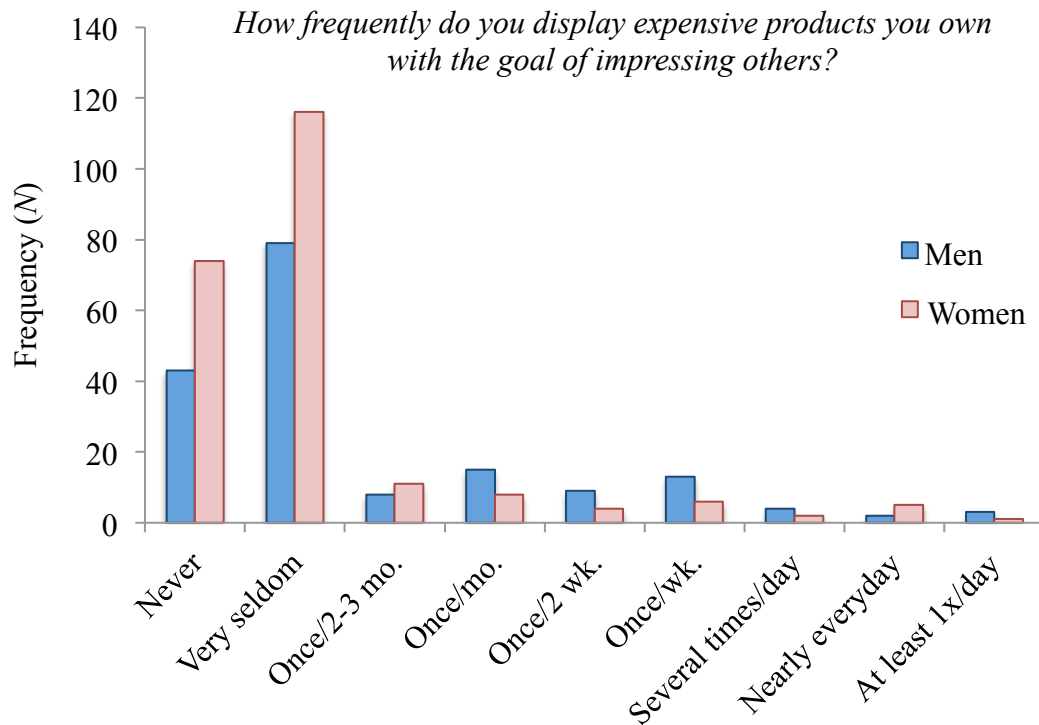
Participants then completed the following surveys in a randomly determined order: Status Concern Scale (e.g., “The raising of one’s social position is one of the more important goals in life;” Kaufman, 1957), Social Dominance Orientation Scale (e.g., “Some groups of people are simply inferior to other groups;” Pratto, Sidanius, Stallworth, & Malle, 1994), Narcissistic Personality Inventory (e.g., “I insist upon getting the respect that I deserve;” Emmons, 1984), Meanings of Conspicuous Consumption Scale (phrased in reference to “designer products,” rather than “Western products” as originally worded;

e.g., “Designer products are social status symbols;” Marcoux, Filiatrault, & Chéron, 1997), and five original questions relating to participants’ conspicuous consumption behavior (e.g., “I own expensive products to impress others;” see Appendix B). Following the completion of all survey measures, participants were debriefed and provided a code to submit in the Mechanical Turk response box to receive payment.

## **Results**

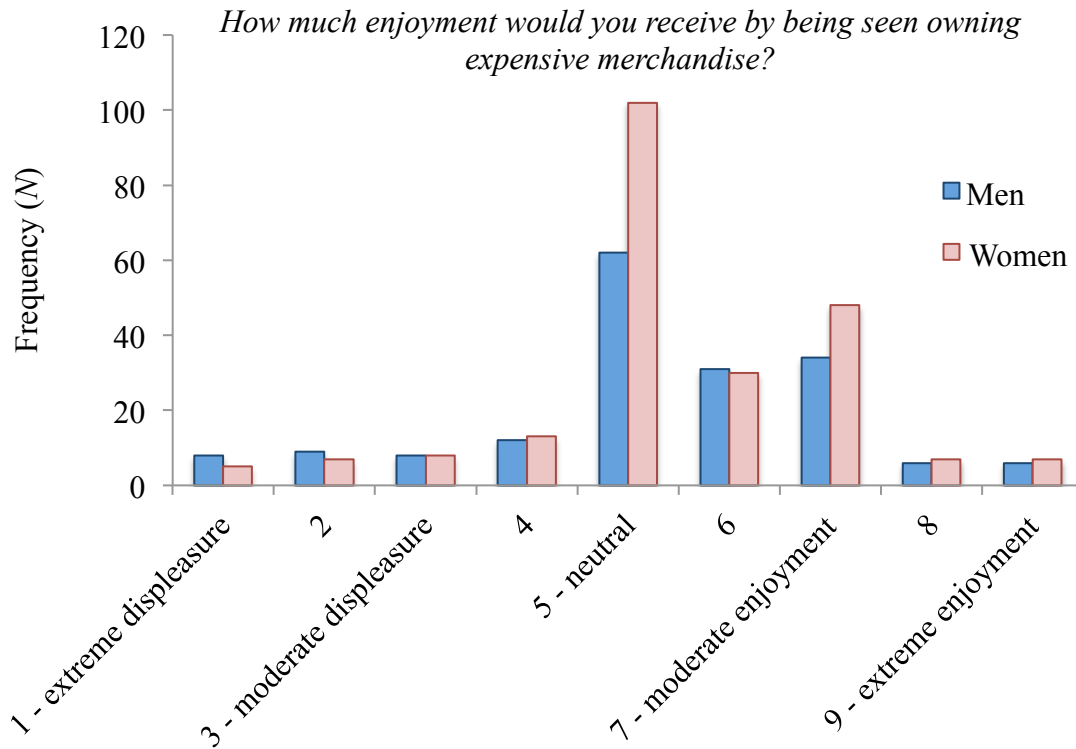
Figure 1 shows a breakdown of the frequency of conspicuous consumption in men and women. A  $\chi^2$  cross-tabulation analysis of participant sex and conspicuous consumption frequency revealed that men reported conspicuously consuming at a higher frequency than expected by chance, whereas women reported conspicuously consuming at a lower frequency than expected by chance,  $\chi^2(8) = 19.15, N = 403, p = .01$ .

Figure 1: Conspicuous Consumption Frequency



Participants also indicated how much enjoyment they would receive by owning expensive merchandise. This served the purpose of assessing participants' motivation to conspicuously consume in the absence of financial constraints, as some participants may wish to conspicuously consume but refrain from buying luxury goods because their cost lies outside of participants' budgets. As shown in Figure 2, the majority of participants ( $N = 307$ ) indicated that they would receive neutral to moderate levels of enjoyment from conspicuously consuming. Men ( $M = 5.31, SE = .13$ ) and women ( $M = 5.46, SE = .10$ ) did not differ in the reported level of enjoyment they would receive by conspicuously consuming,  $t(401) = .94, p = .35$ .

Figure 2: Conspicuous Consumption Enjoyment



### *Status Perceptions of Conspicuous Consumers*

To evaluate the degree to which conspicuous consumption influenced perceptions of status, I conducted an Independent *t*-test comparing participants' status ratings of photographed female confederates carrying a handbag with the Louis Vuitton print present to the status ratings of those carrying a handbag with the Louis Vuitton print absent (see Illustration 1). Participants rated the women carrying a handbag with the Louis Vuitton print present ( $M = 4.32$ ,  $SE = .06$ ) as higher status than those carrying a handbag with the Louis Vuitton print absent ( $M = 4.08$ ,  $SE = .06$ ),  $t(401) = 2.81$ ,  $p < .01$ .

### ***Individual Differences in Conspicuous Consumption***

Several individual difference variables were predicted to correlate with two indices of conspicuous consumption (CC): CC Behavior and CC Attitudes. The CC Behavior variable was designed to assess the degree to which participants engaged in conspicuous consumption by combining participants' responses to the following two questions: (1) "I own expensive products to impress others" and (2) "How frequently do you display expensive products you own with the goal of impressing others?" ( $\alpha = .80$ ; see Appendix B). The CC Attitudes variable was assessed using the Meanings of Conspicuous Consumption Scale (Marcoux, Filiatrault, & Chéron, 1997).

As shown in Table 1, both CC Behavior and CC Attitudes correlated positively with three of the four individual difference variables related to status in men and women. Additionally, CC Behavior and CC Attitudes correlated positively with participants' scores on the Narcissistic Personality Inventory (NPI) generally, and the Exploitation/Entitlement facet in particular, for both men and women.<sup>1</sup>

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<sup>1</sup> Correlations for all facets of the NPI are listed in Table 1, although a priori predictions were only made for the NPI generally and the E/E facet in particular.

Table 1: Correlations of CC Behavior and CC Attitudes Across Several Individual Difference Variables

Individual Difference	CC Behavior		Fisher's $r$ to $z$
	Men	Women	
Socioeconomic Status	$r(176) = .14$	$r(227) = .12$	$z = .20$
Subjective Social Status	$r(176) = .33$ ***	$r(227) = .17$ **	$z = 1.69$
Status Concern Scale	$r(174) = .42$ ***	$r(227) = .24$ ***	$z = 2.00$ *
SDO	$r(171) = .29$ ***	$r(226) = .28$ ***	$z = .11$

NPI total	$r(174) = .29$ ***	$r(227) = .26$ ***	$z = .32$
NPI: E/E	$r(174) = .43$ ***	$r(227) = .38$ ***	$z = .59$
NPI: Leadership/Authority	$r(174) = .20$ **	$r(227) = .11$	$z = .91$
NPI: Superiority/Arrogance	$r(174) = .18$ *	$r(227) = .20$ **	$z = -.20$
NPI: Self-absorption	$r(174) = .23$ **	$r(227) = .18$ **	$z = .51$

Individual Difference	CC Attitudes		Fisher's $r$ to $z$
	Men	Women	
Socioeconomic Status	$r(174) = -.002$	$r(227) = .09$	$z = -.91$
Subjective Social Status	$r(174) = .19$ **	$r(227) = .14$ *	$z = .51$
Status Concern Scale	$r(173) = .49$ ***	$r(227) = .41$ ***	$z = .99$
SDO	$r(170) = .24$ **	$r(226) = .30$ ***	$z = -.63$

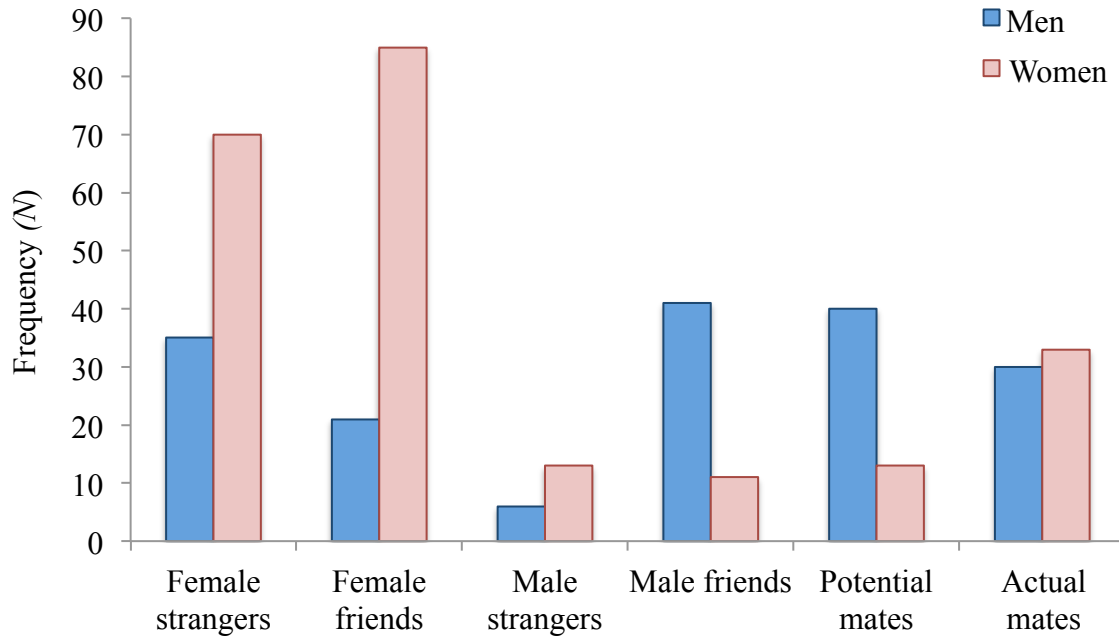
NPI total	$r(173) = .34$ ***	$r(227) = .29$ ***	$z = .55$
NPI: E/E	$r(173) = .50$ ***	$r(227) = .41$ ***	$z = 1.12$
NPI: Leadership/Authority	$r(173) = .24$ **	$r(227) = .14$ *	$z = 1.02$
NPI: Superiority/Arrogance	$r(173) = .17$ *	$r(227) = .23$ ***	$z = -.61$
NPI: Self-absorption	$r(173) = .33$ ***	$r(227) = .20$ **	$z = 1.38$

\*  $\leq .05$       \*\*  $\leq .01$       \*\*\*  $\leq .001$

### *Sex-Specific Targets of Conspicuous Consumption*

A series of  $\chi^2$  cross-tabulation analyses was conducted to determine the types of people men and women most frequently target with their conspicuous consumption. As shown in Figure 3, targets of men's conspicuous consumption differed significantly from targets of women's conspicuous consumption,  $\chi^2(5) = 78.64, p < .001$ .

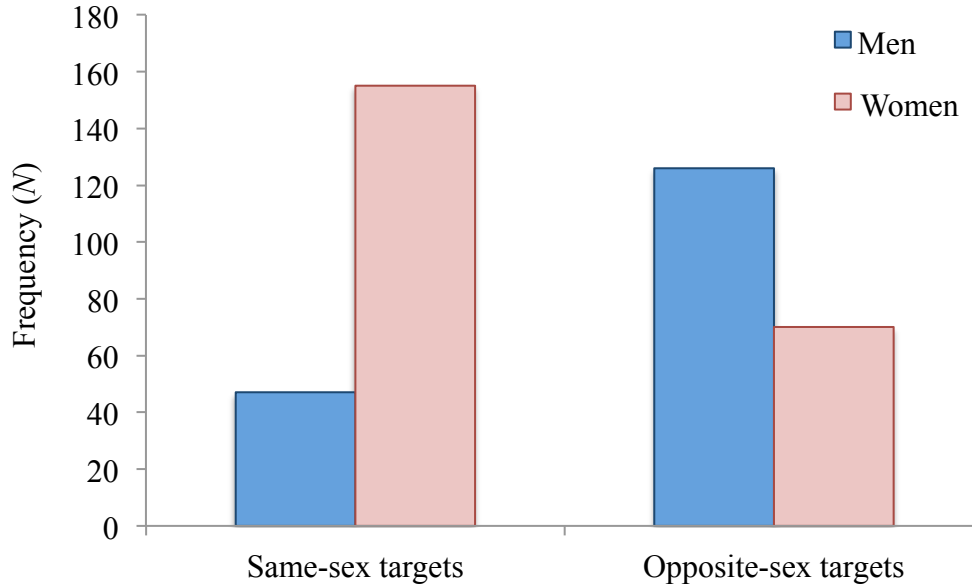
Figure 3: Targets of Men and Women's Conspicuous Consumption



To facilitate data interpretation, the six target categories were then consolidated, distinguishing between same-sex targets and opposite-sex targets. A  $\chi^2$  cross-tabulation analysis showed that men and women targeted same-sex and opposite-sex targets with different frequency,  $\chi^2(1) = 68.11, p < .001$  (see Figure 4). Goodness-of-fit follow-up analyses revealed that men reported trying to impress the opposite-sex (observed = 126, expected = 86.5) more frequently than the same-sex (observed = 47, expected = 86.5),  $\chi^2(1) = 36.08, p < .001$ . In contrast, women reported trying to impress the same-sex (observed = 155, expected = 112.5) more frequently than the opposite-sex (observed = 70, expected = 112.5),  $\chi^2(1) = 32.11, p < .001$ .  $\chi^2$  cross-tabulation analyses were also conducted within each sex to determine whether single and mated participants targeted same-sex and opposite-sex targets differentially; however, for neither men,  $\chi^2(1) = .60, p = .44$ , nor women,  $\chi^2(1) = .32, p = .57$ , was that the case.



Figure 4: Frequency of Targeting Same-Sex vs. Opposite-Sex Others with Conspicuous Consumption



The same sequence of analyses was conducted to explore the sex men and women most frequently *notice* conspicuously consuming. A  $\chi^2$  cross-tabulation analysis revealed that men and women differed with regard to whom they most frequently noticed conspicuously consuming,  $\chi^2(5) = 76.58, p < .001$  (see Figure 5). Once again, the categories were consolidated to distinguish between same-sex and opposite-sex others. As shown in Figure 6, men and women differentially noticed same-sex and opposite-sex others conspicuously consuming,  $\chi^2(1) = 25.73, p < .001$ . Goodness-of-fit follow-up analyses revealed that men noticed the opposite-sex (observed = 100, expected = 87) conspicuously consuming more frequently than the same-sex (observed = 74, expected = 87),  $\chi^2(1) = 3.89, p = .05$ . Women, on the other hand, noticed the same-sex (observed = 154, expected = 113.5) conspicuously consuming more frequently than the opposite-sex (observed = 73, expected = 113.5),  $\chi^2(1) = 28.90, p < .001$ .

Figure 5: Who Men and Women Most Frequently Notice Conspicuously Consuming

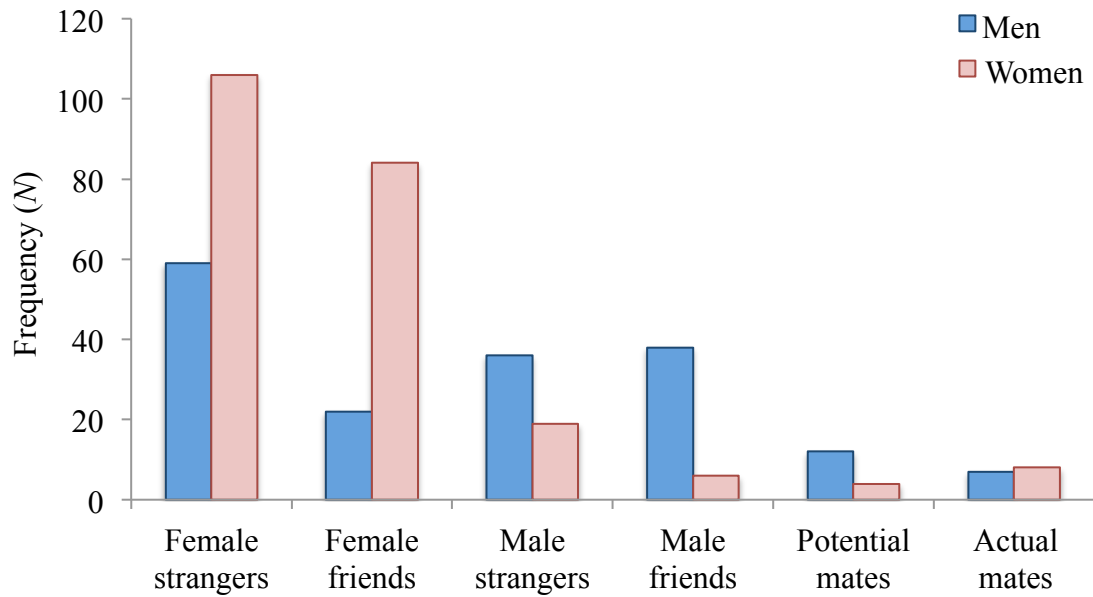
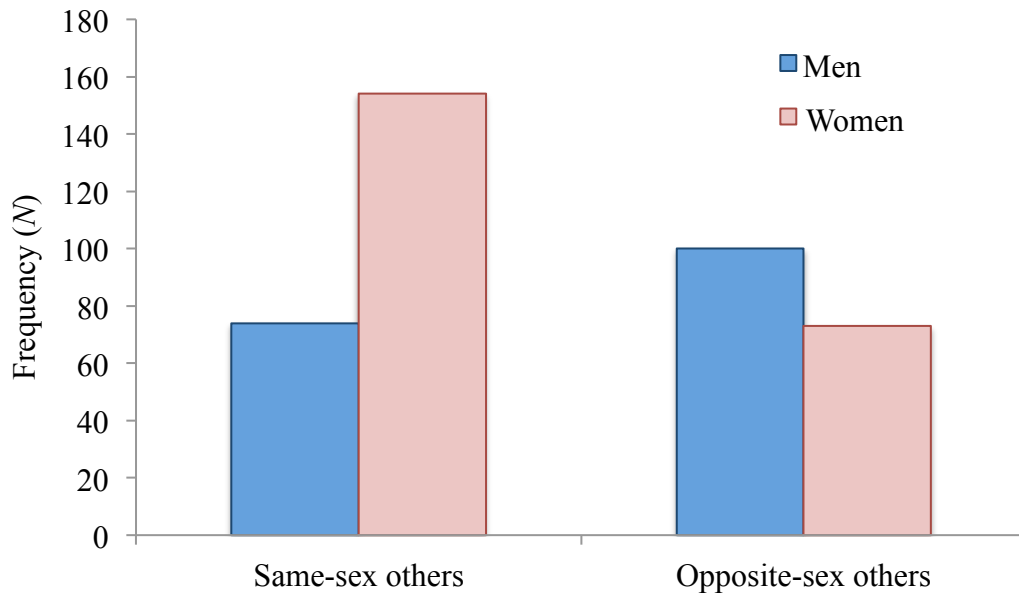


Figure 6: Frequency of Noticing Same-Sex vs. Opposite-Sex Others Conspicuously Consuming



Finally,  $\chi^2$  cross-tabulation analyses were conducted within each sex to explore the moderating effect of participants' relationship status. Within both men,  $\chi^2(1) = 4.61, p = .03$ , and women,  $\chi^2(1) = 58.04, p < .001$ , single and mated participants differentially noticed same-sex and opposite-sex others conspicuously consuming. As shown in Figure 7, goodness-of-fit follow-up analyses revealed that single men noticed opposite-sex others (observed = 61, expected = 47) conspicuously consuming more frequently than same-sex others (observed = 33, expected = 47),  $\chi^2(1) = 8.34, p < .01$ . Mated men, however, noticed opposite-sex others (observed = 39, expected = 40) and same-sex others (observed = 41, expected = 40) conspicuously consuming with equal frequency,  $\chi^2(1) = .05, p = .82$ . As shown in Figure 8, single women noticed opposite-sex others (observed = 46, expected = 33.5) conspicuously consuming more frequently than same-sex others (observed = 21, expected = 33.5),  $\chi^2(1) = 9.33, p < .01$ . In contrast, mated women noticed same-sex others (observed = 133, expected = 80) conspicuously consuming more frequently than opposite-sex others (observed = 27, expected = 80),  $\chi^2(1) = 70.23, p < .001$ .

Figure 7: Frequency of Noticing Same-Sex vs. Opposite-Sex Others Conspicuously Consuming in Single and Mated Men

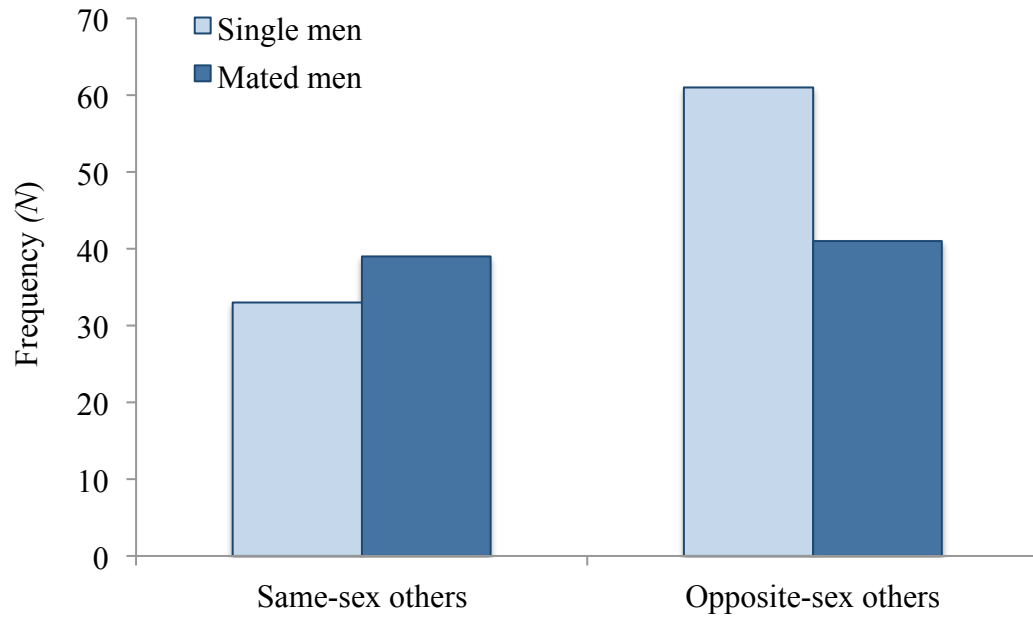
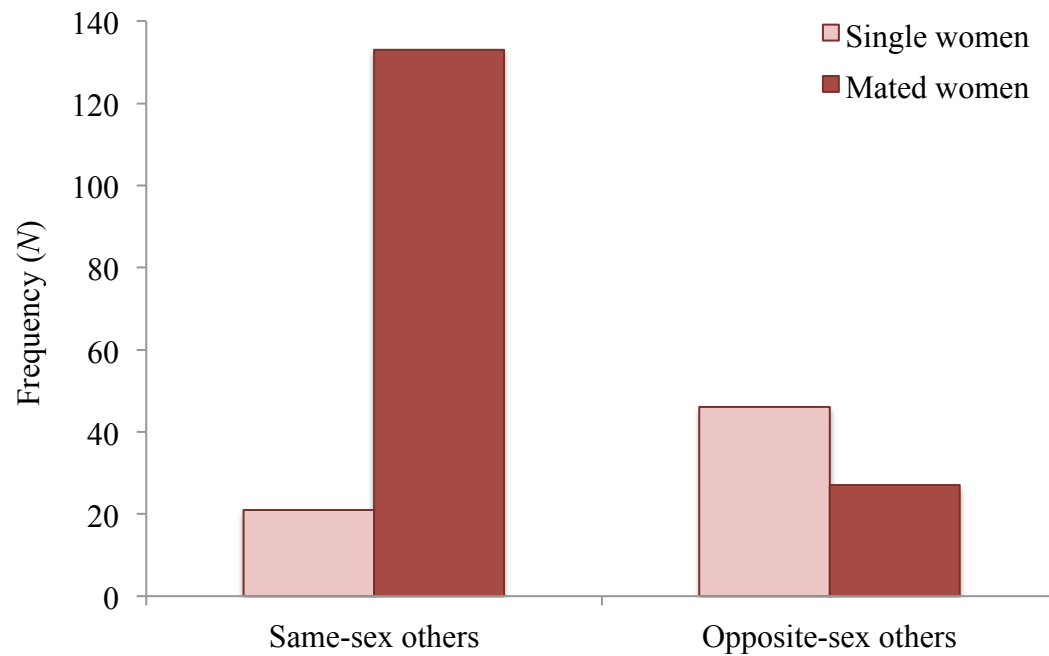


Figure 8: Frequency of Noticing Same-Sex vs. Opposite-Sex Others Conspicuously Consuming in Single and Mated Women



## Discussion

The results provided robust support for almost all of the stated predictions. In addition, exploratory analyses revealed several novel empirical findings, such as the prevalence of conspicuous consumption in U.S. men and women. I will summarize the findings as they relate to each of the stated predictions; I will then conclude with limitations of the current study.

*Exploratory Analysis of the Prevalence of Conspicuous Consumption.* The majority of men ( $N = 122$ , 68.93%) and women ( $N = 190$ , 83.70%) indicated that they never or very seldom conspicuously consume; however, the majority of men ( $N = 127$ , 72.16%) and women ( $N = 180$ , 79.30%) also reported that they would receive neutral to moderate levels of enjoyment from conspicuously consuming. This pattern of findings is consistent with the possibility that many would like to conspicuously consume, yet refrain from doing so because they cannot afford luxury goods. Considering that the most effective status signals are those that are the most expensive, individuals who cannot afford the financial commitment necessary to compete amongst other status strivers may refrain from investing money in conspicuous consumption entirely, and instead employ another strategy to jockey for status (e.g., attain specialized knowledge).

*Status Perceptions of Conspicuous Consumers.* The prediction that photographed women would be perceived as higher status when carrying an expensive, designer handbag than an inexpensive, generic handbag received strong support. Women carrying a handbag with the Louis Vuitton print present were perceived to be higher status than the same women carrying the same handbag with the Louis Vuitton print absent. Remarkably, simply changing the print on a woman's handbag caused perceptions of the *woman's* status to change. To my knowledge, this is the first empirical demonstration that conspicuous consumption is an effective status-enhancement tactic.

*Individual Differences in Conspicuous Consumption.* The obtained results almost entirely supported the prediction that individual difference variables related to status would positively correlate with behavioral and attitudinal measures of conspicuous consumption. Three measures of status—(1) subjective social status (Adler, Epel, Castellazzo, & Ickovics, 2000), (2) status concern (Kaufman, 1957), and (3) social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994)—correlated positively with the degree to which participants engaged in conspicuous consumption (CC Behavior). Likewise, as participants' scores increased across the same three status measures, their attitudes toward conspicuous consumption became more favorable (CC Attitudes). This consistent pattern of findings emerged despite each of the status-related constructs being operationalized somewhat differently. MacArthur's Scale of Subjective Social Status (Adler, Epel, Castellazzo, & Ickovics, 2000) is a snapshot of participants' self-perceived *current* social standing, whereas Kaufman's (1957) Status Concern Scale assesses the value participants place on *attaining* status. Finally, Social Dominance Orientation (Pratto, Sidanius, Stallworth, & Malle, 1994) provided an indirect assessment of status, as it measures a predilection characteristic of high status individuals—a preference for hierarchy in groups. Combined, these correlations provide robust support for the status signaling function of conspicuous consumption. Those for whom attaining or maintaining high status is a top priority conspicuously consume to communicate their (desired or actual) status standing to others.

Contrary to my prediction, participants' SES did not correlate significantly with either measure of conspicuous consumption (CC Behavior or CC Attitudes). One explanation for this null result is that high-SES individuals' motivation to advertise their current status standing is matched by low-SES individuals' motivation to increase their current status standing, both of which can be achieved through resource display. In

addition, the pervasiveness of credit cards has made luxury goods affordable, at least in the short-term, for individuals across all income brackets (Frank, 1999). This interpretation is substantiated by research showing that people are especially likely to purchase luxury goods using credit, as credit decouples the psychological cost of expenditure from the hedonic pleasure of conspicuously consuming (Pettit & Sivanathan, 2011). Should this trajectory of credit card use continue, truly high status individuals are expected to engage in alternate forms of status signaling that are less easily copied by others (Simmel, 1895/1957).

As predicted, individual differences in narcissism, particularly within the exploitation/entitlement (E/E) facet of the Narcissistic Personality Inventory, positively correlated with the degree to which participants engaged in conspicuous consumption (CC Behavior) and participants' attitudes toward conspicuous consumption (CC Attitudes). Individuals who score highly on the E/E facet tend to be Machiavellian by nature, prone to interpersonal manipulation and the exploitation of others. Many benefits associated with status, such as the abilities to make more effectual threats (Faley & Tedeschi, 1971) and to insulate oneself from social sanction (Eckel, Fatas, & Wilson, 2010), would be particularly advantageous to those inclined to take advantage of others. Thus, E/E narcissists may be especially likely to use conspicuous consumption as a status-enhancement tactic in order to apply the interpersonal benefits associated with status to the exploitation of others. The results of Back, Schmukle, and Egloff (2010) provide preliminary support for this extrapolation, showing that the flashy attire worn by E/E narcissists makes them more charming at first sight.

*Sex-Specific Targets of Conspicuous Consumption.* Results strongly supported the prediction that male and female participants would report trying to impress women more frequently than men in their conspicuous consumption. Indeed, over two-thirds of both

men (72.83%) and women (68.89%) targeted women with their conspicuous consumption. This pattern of findings accords well with sex-specific motivations to conspicuously consume—men target women in the service of mate attraction, whereas women target women to elicit interpersonal benefits from those who constitute their social networks. Interestingly, these results were not affected by participants' relationship status; single and mated participants of both sexes targeted women with greater frequency than men. The absence of a moderating effect of relationship status in men is not particularly surprising as evidence suggests that men opportunistically seek short-term sexual liaisons outside of long-term romantic relationships (Buss & Schmitt, 1993; Gangestad & Simpson, 2000). Thus, single and mated men alike engage in status display as the motivation to attract potential mates does not fully cease upon entering a romantic relationship. In contrast, it appears that women do not use conspicuous consumption as a mate attraction tactic, as neither single nor mated women preferentially targeted men.

In an exploratory analysis, I also assessed the sex men and women most frequently noticed conspicuously consuming. Both men (57.47%) and women (67.84%) noticed women conspicuously consuming more frequently than men. This finding was not simply the result of women conspicuously consuming more frequently than men, as my data indicated the reverse to be true. Moreover, these findings contrast with those of DeWall and Maner (2008) showing that people preferentially attend to high status men, but not women. Importantly, DeWall and Maner used methodologies that provide near immediate feedback (e.g., eye-tracker) to measure attention, whereas I merely asked participants to recall who they most frequently noticed conspicuously consuming. The latter methodology is particularly susceptible to biases that result from internalized stereotypes (e.g., women as the spendthrift sex), which may have in turn misled participants to recall women conspicuously consuming more frequently than men.



Exploratory analyses also revealed a moderating effect for relationship status on the sex participants most frequently noticed conspicuously consuming. Within men, single participants noticed opposite-sex others conspicuously consuming more frequently than same-sex others, whereas mated participants noticed opposite-sex and same-sex others conspicuously consuming with equal frequency. These findings suggest that single men attend to potential mates more so than intrasexual rivals, but that once mated, men divide their attention between extrapair mating opportunities and intrasexual rivals (e.g., mate poachers; Schmitt & Buss, 2001). Similar results were revealed in women; single participants noticed opposite-sex others conspicuously consuming more frequently than same-sex others, however, in mated participants the opposite was true. These findings indicate that single women stringently evaluate the resource holdings of potential mates (consistent with previous research; Buss, 1989), but that once mated, women shift their attention toward those with whom they are most likely to jockey for status—other women.

*Limitations.* Several limitations qualify these findings but provide useful directions for future research. One limitation concerns the external validity of the photograph manipulation task. In real-life circumstances, status assessments are rarely based on an individual's appearance alone. Instead, multiple factors (e.g., specialized knowledge; Henrich & Gil-White, 2001) are considered simultaneously in the formation of status judgments. Research using a more ecologically valid methodology (e.g., face-to-face interactions) is necessary to validate the impact of conspicuous consumption on perceptions of status.

In addition, measures of conspicuous consumption used in the present study were constrained by the presumption that individuals have conscious access to their motivations to conspicuously consume, when in fact such motivations may be cognitively

impenetrable. For instance, some may ultimately conspicuously consume to increase their social acceptance (Lee & Shrum, 2012; Mead et al., 2010), yet explain their spending behavior as the result of a preference for high quality goods. Furthermore, to the extent that individuals are aware of their motivations to conspicuously consume, they may be especially reluctant to admit to doing so “to impress others” (as phrased in the measures of CC Behavior and CC Attitudes), for fear of being perceived as insecure or superficial. Despite these limitations, almost all of the predicted correlations emerged between key individual difference variables and participants’ conspicuous consumption.

*Conclusions.* The current study accomplished three primary objectives. Most notably, (1) conspicuous consumption was established as an effective status-enhancement tactic, licensing its use as a manipulation of status in Studies 2 and 3 of this research program. In addition, the current study made a number of novel contributions to the empirical literature by identifying (2) several individual difference variables that predict conspicuous consumption, as well as (3) the sex-specific targets of conspicuous consumption.

## **STUDY 2: FACE-TO-FACE INTERACTION**

The primary purpose of Study 2 was to replicate the Study 1 finding that conspicuous consumption increases perceptions of status using a more ecologically valid methodology (i.e., face-to-face interactions). Each face-to-face interaction occurred between one participant and one confederate dressed conspicuously or inconspicuously. Unlike Study 1, which assessed the effectiveness of conspicuous consumption as a status-enhancement tactic only in women, the design of Study 2 was fully cross-sexed such that male and female participants interacted with male and female confederates. A secondary

objective was to explore participants' motivation to affiliate with confederates as a function of conspicuous consumption.

## **Predictions**

*Prediction 2.1: Confederates will be perceived as higher status when conspicuously consuming than when not conspicuously consuming.* Following the logic of Prediction 1.1, conspicuous consumption is expected to increase perceptions of status as the ownership of costly material possessions provides evidence of economic power, which is associated with status (Frank, 1999).

*Prediction 2.2: Participants will be more strongly motivated to affiliate with confederates who are conspicuously consuming than confederates who are not conspicuously consuming.* Affiliating with high status individuals avails oneself of the positive externalities—properties of one individual that are incidentally beneficial to another (Tooby & Cosmides, 1996)—that result from high status individuals having greater control over their physical and social environments (e.g., coalitional protection; see Henrich & Gil-White, 2001 for a review). Research has also shown that by associating with those of high status, individuals enhance their own status standing (Dijkstra, Cillessen, Lindenberg, & Veenstra, 2010). It is therefore predicted that participants will be more strongly motivated to affiliate with confederates in the conspicuous condition than inconspicuous condition as measured by (1) their desire to become friends with the confederate, (2) their admiration for the confederate, and (3) the degree to which participants perceive their own status and popularity increasing by becoming friends with the confederate.

*Prediction 2.2.1: Participants' motivation to affiliate with confederates in the conspicuous condition, more so than their motivation to affiliate with confederates in the*

*inconspicuous condition, will be greater in same-sex interactions than opposite-sex interactions.* The goals of same-sex others are probabilistically more similar to one's own goals than those of opposite-sex others. Therefore, positive externalities that result from the goal-pursuit of same-sex individuals are likely to benefit oneself to a greater degree than those that result from the goal pursuit of opposite-sex individuals. For instance, a high status woman who elicits courtship effort from men incidentally provides information regarding the quality of potential mates to those with whom she associates. Additionally, affiliating with high status individuals of the same sex provides opportunities to "infocopy" (Henrich & Gil-White, 2001), by observing the sex-specific tactics that are rewarded with status, such as self-assertiveness in men and a group-oriented focus in women (Buss, 1981).

## **Method**

### ***Participants***

The sample consisted of 120 university students (49 men, 71 women) who agreed to participate in exchange for course credit. Participants' ages ranged from 17 to 39 ( $M = 19.98$ ,  $SD = 2.68$ ). Approximately 22% of participants ( $N = 26$ ) were currently involved in a committed romantic relationship. As part of a series of questions assessing participants' SES, 4.17% ( $N = 5$ ) of participants classified their family of origin as lower class, 15.83% ( $N = 19$ ) as lower-middle class, 39.17% ( $N = 47$ ) as middle class, 35.00% ( $N = 42$ ) as upper-middle class, and 5.83% ( $N = 7$ ) as upper class.

### ***Materials***

*Status Manipulation.* Conspicuous consumption served as the sole status manipulation for male and female confederates. As shown in Illustration 2, male confederates assigned to the conspicuous condition wore a Ralph Lauren collared shirt,

(replica) Rolex watch, and Ray-Ban sunglasses and carried Porsche keys and an iPhone. Male confederates assigned to the inconspicuous condition wore a t-shirt, generic watch, and generic sunglasses and carried Kia keys and an outdated cell phone. Male confederates were instructed to wear jeans in both conditions.

Illustration 2: Status Manipulation of Male Confederates



A. Conspicuous Condition



B. Inconspicuous Condition

As shown in Illustration 3, female confederates assigned to the conspicuous condition wore Dolce and Gabbana sunglasses and carried a Louis Vuitton tote, a Coach handbag, and an iPhone. Female confederates assigned to the inconspicuous condition wore generic sunglasses and carried a generic tote, a generic handbag, and an outdated cell phone. Female confederates were instructed to wear a white t-shirt and jeans, regardless of condition. Male and female confederates were assigned to the conspicuous or inconspicuous condition prior to each experimental condition in a counterbalanced order.

Illustration 3: Status Manipulation of Female Confederates



To confirm that the products used in the conspicuous condition had greater status associated with them than the products used in the inconspicuous condition, a separate sample of 42 university students (10 men, 32 women) evaluated the status of a hypothetical man or woman who owned each product on a 1 (very low status) to 7 (very high status) Likert scale<sup>2</sup>. Paired sample *t*-tests indicated that greater status was associated with each product used in the conspicuous condition than its analog in the inconspicuous condition (all *ps* < .001; see Table 2).

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<sup>2</sup> Third-party ratings were not collected for either phone used in the status manipulation.

Table 2: Status Ratings of Products Used in the Conspicuous and Inconspicuous Conditions

<b>Female Confederates</b>		
Paired Comparison	Mean (SE)	<i>t</i> -test Result
Louis Vuitton tote	5.90 (.14)	$t(41) = 11.48, p < .001$
Generic tote	3.81 (.16)	
Coach handbag	5.21 (.16)	$t(41) = 7.04, p < .001$
Generic handbag	3.93 (.18)	
D&G sunglasses	5.45 (.17)	$t(41) = 9.43, p < .001$
Generic sunglasses	3.07 (.15)	

<b>Male Confederates</b>		
Paired Comparison	Mean (SE)	<i>t</i> -test Result
Ralph Lauren shirt	5.10 (.13)	$t(41) = 10.33, p < .001$
Generic t-shirt	3.12 (.15)	
“Rolex” watch	5.38 (.14)	$t(41) = 9.24, p < .001$
Generic watch	3.55 (.15)	
Ray-Ban sunglasses	5.17 (.12)	$t(41) = 8.38, p < .001$
Generic sunglasses	3.17 (.19)	
Porsche keys	6.81 (.10)	$t(35) = 36.69, p < .001^3$
Kia keys	1.25 (.08)	

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<sup>3</sup> A separate sample of participants ( $N = 36$ ) rated the status associated with Porsche and Kia keys upon viewing them in person.



*First Impressions Survey.* This instrument was primarily designed to assess the degree to which conspicuous consumption influenced perceptions of status. Participants rated how much the confederate, who was referred to as participants' "interaction partner," demonstrated a particular trait relative to others of the same age on a 1 (demonstrates the trait much *less* than others) to 7 (demonstrates the trait much *more* than others) Likert scale. The key variable of interest—confederates' perceived social status—was embedded amongst nine other randomly ordered traits (e.g., friendliness; see Appendix C). Additionally, participants rated their agreement with four questions related to their motivation to affiliate with the confederate on a 1 (strongly disagree) to 7 (strongly agree) Likert scale (see Appendix D).

### ***Procedure***

Participants reported to the lab one at a time. Upon each participant's arrival, an experimenter seated the participant next to the confederate and instructed both parties to read and sign an informed consent form. The participant and confederate were then escorted to a private room to begin their interaction. Within the room, two chairs were positioned on opposite sides of a small table. Near the table was a sign suggesting five neutral discussion topics (e.g., What is the best way to cool off on a hot day?). Confederates were trained to recite a scripted answer for each discussion topic. Each participant and confederate dyad engaged in a 10-minute discussion, during which time the confederate occasionally drew attention to the products used in the status manipulation (e.g., male confederates fiddled with their keys, female confederates reached into their handbag for chapstick). Immediately following this interaction, the participant was separated from the confederate to complete the First Impressions Survey in private. Once completed, each participant was thanked and debriefed.

## Results

### *Status Perceptions of Conspicuous Consumers*

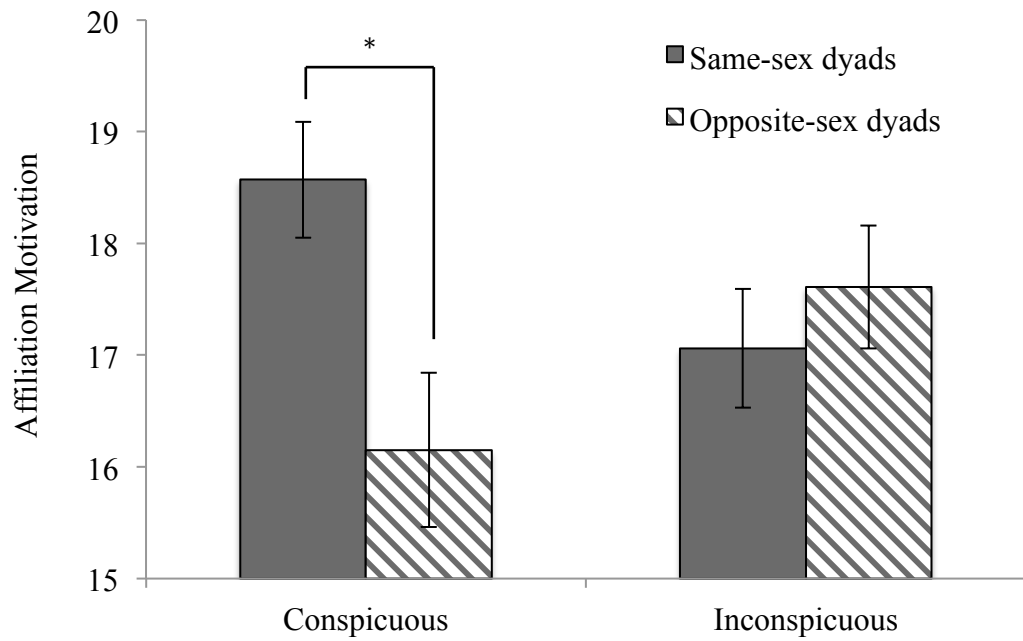
To evaluate whether confederates were perceived to be higher status when conspicuously consuming than when not, I conducted an Independent *t*-test comparing the status ratings of confederates in the conspicuous condition to those of confederates in the inconspicuous condition. Contrary to Prediction 2.1, confederates were not rated as higher status when assigned to the conspicuous condition ( $M = 4.89$ ,  $SE = .12$ ) than inconspicuous condition ( $M = 4.69$ ,  $SE = .10$ ),  $t(118) = 1.28$ ,  $p = .21$ ; however, restricting the analysis to same-sex dyads produced a near-significant result. Participants perceived same-sex confederates to be higher status when conspicuously consuming ( $M = 5.06$ ,  $SE = .16$ ) than when not ( $M = 4.68$ ,  $SE = .12$ ),  $t(67) = 1.92$ ,  $p = .06$ . The effect of experimental condition (conspicuous vs. inconspicuous) on perceptions of status did not differ across female same-sex dyads and male same-sex dyads,  $F(1, 65) = .38$ ,  $p = .54$ .

### *Affiliation Motivation*

Participants' agreement with each of the four questions related to affiliation motivation was combined to form a solitary construct ( $\alpha = .73$ ). In contrast to Prediction 2.2, participants were not more strongly motivated to affiliate with confederates in the conspicuous condition ( $M = 17.69$ ,  $SE = .41$ ) than inconspicuous condition ( $M = 17.32$ ,  $SE = .40$ ),  $t(118) = .63$ ,  $p = .53$ . Supporting Prediction 2.2.1, however, experimental condition (conspicuous vs. inconspicuous) interacted with dyad type (same-sex vs. opposite-sex),  $F(1, 116) = 6.63$ ,  $p = .01$ . As depicted in Figure 9, Tukey HSD comparisons showed that participants' motivation to affiliate with confederates dressed conspicuously was greater in same-sex interactions ( $M = 18.57$ ,  $SE = .52$ ) than opposite-sex interactions ( $M = 16.15$ ,  $SE = .69$ ), whereas participants' motivation to affiliate with

confederates dressed inconspicuously did not differ between same-sex ( $M = 17.06$ ,  $SE = .53$ ) and opposite-sex ( $M = 17.61$ ,  $SE = .55$ ) interactions.

Figure 9: Affiliation Motivation as a Function of Experimental Condition and Dyad Type

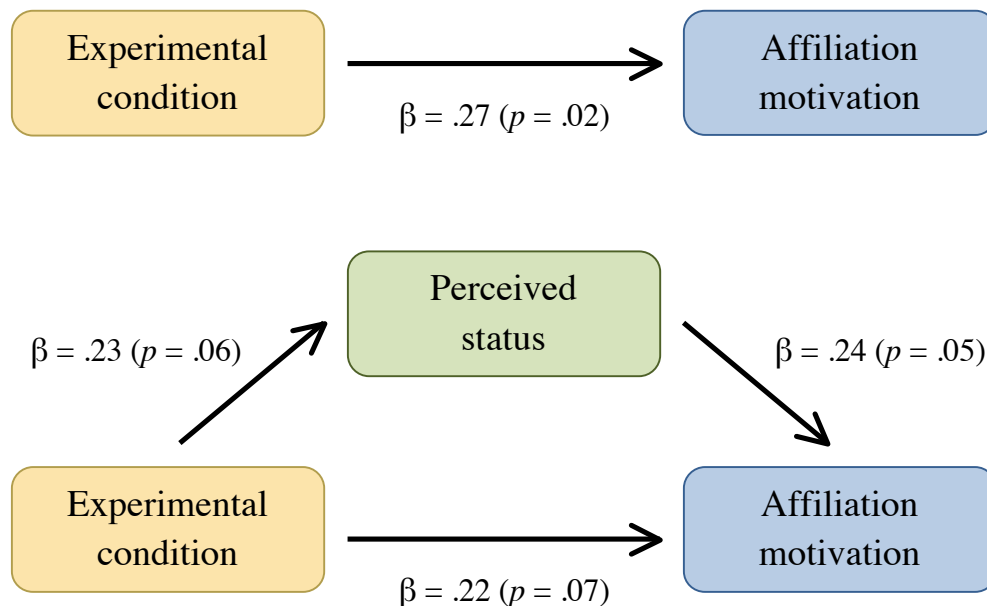


\* Tukey HSD < .05

### *Exploratory Mediation Analysis*

To test whether participants' increased motivation to affiliate with conspicuously consuming confederates was mediated by the confederates' perceived status, I conducted a mediational analysis within same-sex dyads using Baron and Kenny's steps. In Steps 1 and 2, experimental condition was shown to affect participants' affiliation motivation ( $\beta = .27, p = .02$ ) and perceptions of confederates' status ( $\beta = .23, p = .06$ ). In Step 3, perceptions of confederates' status predicted participants' affiliation motivation ( $\beta = .24, p = .05$ ) with experimental condition included in the model ( $\beta = .22, p = .07$ ; see Figure 10). These results indicate that confederates' perceived status partially mediated the relationship between experimental condition and participants' affiliation motivation.

Figure 10: Mediation of the Relationship between Experimental Condition and Affiliation Motivation by Perceived Status in Same-Sex Dyads



## Discussion

The results provided mixed support for Study 2 predictions. As a whole, conspicuous consumption did not increase participants' perceptions of confederates' status or participants' desire to affiliate with confederates; however, the predicted effects emerged in same-sex interactions. I will discuss the implications of each of these findings in turn. I will then synthesize the results of Study 1 and Study 2 to form broad-ranging conclusions that speak to the function of conspicuous consumption.

*Status Perceptions of Conspicuous Consumers.* In general, the results did not support the prediction that confederates would be perceived as higher status when conspicuously consuming than when not. Conspicuous consumption did, however, increase perceptions of status when the interacting participant and confederate were of the same sex. One possibility that accounts for the exclusivity of the effect to same-sex dyads is a differential motivation to attend to indices of status in same-sex individuals. If status hierarchies are primarily composed of same-sex individuals, priority should be given to information regarding the status of same-sex others as they present the greatest source of competition. Alternatively, this pattern of findings may have resulted from a sex-specific sensitivity to the products used in the status manipulation of male and female confederates. For example, female participants may be more likely to have knowledge of the cost of a Louis Vuitton tote, whereas male participants may more easily recognize the appearance of Porsche keys.

*Affiliation Motivation.* Mirroring the results above, findings did not support the prediction that participants would be more strongly motivated to affiliate with confederates who were conspicuously consuming than those who were not. However, qualifying this null result was an interaction between experimental condition and dyad type. As predicted, participants reported a stronger motivation to affiliate with same-sex

confederates who were conspicuously consuming than opposite-sex confederates who were conspicuously consuming. In contrast, participants were equally motivated to affiliate with confederates who were not conspicuously consuming in same-sex and opposite-sex interactions. These findings are consistent with the premise that greater benefits are realized by affiliating with high status individuals of the same sex than the opposite sex as the former emit positive externalities (e.g., opportunities to infocopy) that contribute to the attainment of one's own goals to a larger extent.

*Conclusions.* Supporting the findings of Study 1, conspicuous consumption was shown to be an effective manipulation of status in same-sex face-to-face interactions. Strikingly, the ownership of luxury goods influenced perceptions of status despite a barrage of potentially competing cues present in face-to-face interactions (e.g., posture; Weisfeld & Beresford, 1982). In addition, the current study is the first to investigate affiliation motivation as a function of conspicuous consumption. Results of the mediational analysis suggest that indices of status (i.e., conspicuous consumption) activate a motivation to affiliate with same-sex individuals. Future studies are needed to replicate these effects and determine the extent to which affiliation motivation affects actual behavior.

## **CHAPTER CONCLUSIONS**

The amount of research devoted to understanding the psychology of conspicuous consumption has been wildly incommensurate with the great sums of money individuals spend on luxury goods each year. The studies reviewed above mark an early attempt to help fill this empirical void.

Findings from this research endeavor have thus far been largely consistent with a status signaling explanation for conspicuous consumption. In Studies 1 and 2,

conspicuous consumption was shown to increase perceptions of status, primarily in same-sex interactions (Study 2). It was also found that those who employ this status-enhancing tactic attribute greater importance to achieving and maintaining high status (Study 1). Finally, results supported a number of ancillary predictions, one showing women to be the target audience of both sexes' conspicuous consumption (Study 1); a second showing that conspicuous consumption activates a motivation to affiliate with same-sex individuals (Study 2).

These findings explain conspicuous consumption as a behavioral consequence of status striving mechanisms, but they do not address the issue of why men and women aspire to be high status in the first place. That is, what interpersonal benefits motivate individuals to increase perceptions of their status through conspicuous consumption? As reviewed in Chapter 1, men receive clear status benefits in the form of mate attraction. The benefits associated with status in women, however, remain unclear. In the following chapter, access to resources is tested as an interpersonal benefit that incentivizes status striving behavior in men and women.

### **Chapter 3: Access to Resources**

As detailed in Chapter 1, the power of pulling rank brings many benefits. One class of status benefits involves the conferral of resources, which can be either social (e.g., the assistance of others) or material (e.g., food). An example of a social resource received by high status women is the assistance of allomothers (i.e., local females who provide maternal care) who stabilize the demands of motherhood by sharing in responsibilities such as caretaking and breastfeeding (Hrdy, 1999). Although integral across countless domains, social resources are less the focus of the current research than the conferral of material resources.

Material resources are unique in their ability to be stockpiled. This property decouples the value of material resources from an individual's present circumstances. For example, a spear holds value regardless of whether one is currently in need of a spear because of its ability to be kept in reserve. In contrast, social resources cannot be physically stored so their value is dependent upon one's current state of need (e.g., a helping hand has little value for tasks that do not require the coordination of two or more people). Thus, access to material resources is expected to be a more straightforward benefit to test empirically than access to social resources, as material resources hold a relatively consistent value.

#### **FITNESS BENEFITS OF MATERIAL RESOURCES**

Access to material resources benefits men and women through different channels. This is because men and women's reproductive success is limited by different factors; men are limited by access to mates, whereas women are limited by access to resources (Trivers, 1972). Relative to men, women have a greater ultimate responsibility to satisfy the energetic and nutritional demands of their offspring pre- and postnatally. This



requires the successful procurement of material resources, which have been shown to predict increased birth weight (Ellison, 2003; Langley-Evans & Carrington, 2006), increased milk intake by breastfeeding infants (Rasmussen, 1992), and greater infant immune response (Langley-Evans & Carrington, 2006). Thus, to the extent that status is rewarded with prioritized access to material resources, reproductive-aged women are expected to engage in status striving to increase their likelihood of securing the resources necessary for offspring survival.

#### **ACCESS TO RESOURCES AS A STATUS BENEFIT**

In spite of the enormous fitness benefits associated with having access to material resources, little research has explored whether material resources are disproportionately accrued by high status individuals. Until recently, access to resources as a function of status was studied almost exclusively in nonhuman primates. For instance, high ranking female chimpanzees have been shown to monopolize the resources necessary to rear offspring (Pusey, Williams, & Goodall, 1997). Consequently, their infants are more likely to survive, reach menarche earlier, produce more offspring annually, and live longer than those of low ranking mothers (Pusey, Williams, & Goodall, 1997).

Recently, Nelissen and Meijers (2011) tested access to material resources (i.e., money) as a status benefit in humans. Much like the current studies, the researchers used conspicuous consumption as a proxy for status. Their results showed that confederates were able to solicit larger donations for a charity fund when wearing luxury brand apparel than generic brand apparel. In addition, the researchers found that individuals were more generous toward high status targets than low status targets across two economic games (e.g., the Dictator Game). Regrettably, however, participants were only shown a picture of the high or low status target in the economic games; they did not play face-to-face.

This is problematic from the participants' perspective because there is uncertainty regarding whether the target would receive knowledge of how they were treated in the economic game. In the event that the target remains ignorant, there would be no consequences of being particularly stingy or generous toward another. Nevertheless, this series of studies provides preliminary evidence that high status individuals indeed receive privileged access to material resources.

### **STUDY 3: DICTATOR GAME**

The purpose of Study 3 was to replicate the findings of Nelissen and Meijers (2011) using a Dictator Game methodology played face-to-face. Unlike Nelissen and Meijers, I examined the sex-specific effects of status on the conferral of resources using a fully cross-sexed design, such that male and female participants played the Dictator Game against male and female confederates.

In the Dictator Game, one player—the Dictator—is given a sum of money to share (or not share) however he or she chooses with the other player—the Receiver. The Receiver's role is entirely passive; he or she simply accepts the amount of money allotted by the Dictator. In order to compare the amount of money participants shared with confederates in the conspicuous condition to those in the inconspicuous condition, all participants were assigned to the role of the Dictator.

### **Predictions**

Predictions 3.1, 3.2, and 3.2.1 parallel predictions made in Studies 1 and 2 to test in the Study 3 sample. Predictions 3.3 and 3.3.1 pertain exclusively to Study 3.

*Prediction 3.1: Confederates will be perceived as higher status when conspicuously consuming than when not conspicuously consuming.*

*Prediction 3.2: Participants will be more strongly motivated to affiliate with confederates who are conspicuously consuming than confederates who are not conspicuously consuming.*

*Prediction 3.2.1: Participants' motivation to affiliate with confederates in the conspicuous condition, more so than their motivation to affiliate with confederates in the inconspicuous condition, will be greater in same-sex interactions than opposite-sex interactions.*

*Prediction 3.3: Participants will share more of their monetary allotment in the Dictator Game with confederates who are dressed conspicuously than with those who are not.* At first blush, the idea of giving resources to those who are least in need (i.e., high status individuals) is counterintuitive. However, by treating those of high status favorably, an individual benefits him or herself through three possible avenues. One's own generosity is likely to (1) increase the probability of associating with the high status individual in the future, thereby increasing one's own status (Dijkstra, Cillessen, Lindenberg, & Veenstra, 2010) and providing access to his or her positive externalities; (2) initiate a series of reciprocal exchanges with the high status individual whose coalitional power could be particularly useful; and (3) prevent retaliation from the high status individual for what might have otherwise been perceived as insufficient deference.

*Prediction 3.3.1: The amount of money participants share with confederates in the conspicuous condition, more so than the amount of money they share with confederates in the inconspicuous condition, will be greater in same-sex interactions than opposite-sex interactions.* Following the logic of Prediction 2.2.1, affiliating with high status individuals of the same sex avails oneself of positive externalities that are specific to one's own sex and provides opportunities to observe the tactics that are rewarded with status in one's own sex. Thus, to the extent that the conferral resources increases the

likelihood of affiliating with high status individuals in the future, participants are expected to share more of their monetary allotment with conspicuously consuming confederates of the same sex than opposite sex to obtain these benefits.

## **Method**

### ***Participants***

The Study 3 sample consisted of 371 university students (143 men, 228 women) who agreed to participate in exchange for course credit. Participants' ages ranged from 17 to 57 ( $M = 18.90$ ,  $SD = 2.42$ ). Approximately 27% of participants ( $N = 101$ ) were currently involved in a committed romantic relationship. As part of a series of questions assessing participants' SES, 5.39% ( $N = 20$ ) of participants classified their family of origin as lower class, 12.94% ( $N = 48$ ) as lower-middle class, 39.89% ( $N = 148$ ) as middle class, 37.20% ( $N = 138$ ) as upper-middle class, and 4.58% ( $N = 17$ ) as upper class.

### ***Materials***

*Status Manipulation.* As in Study 2, conspicuous consumption served as the sole status manipulation. The products used for male and female confederates in the conspicuous and inconspicuous conditions did not differ from those used in Study 2 (see Illustrations 2 and 3). Before each experimental session, male and female confederates were assigned to the conspicuous or inconspicuous condition in a counterbalanced order.

### ***Computerized Tasks***

1. *Dictator Game.* Under the façade of random assignment, all participants were assigned to the role of the Dictator (confederates were, *ipso facto*, assigned to the role of the Receiver). As the Dictator, participants were given \$9.00 to share with the Receiver however they chose in whole dollar amounts. The monetary allotment consisted of an odd

number of dollars to prevent participants from splitting the sum exactly in half. Participants selected one of ten allocation options, ranging from “give \$0.00 (and keep \$9.00)” to “give \$9.00 (and keep \$0.00)” (see Appendix E).

2. *First Impressions Survey*. Recall from Study 2 that this instrument was designed to assess the degree to which conspicuous consumption influenced perceptions of status by collecting status ratings of confederates on a 1 to 7 Likert scale (see Appendix C). In addition, participants rated their agreement with four questions related to their motivation to affiliate with confederates on a 1 to 7 Likert scale (see Appendix D).

### ***Procedure***

The procedures of Studies 2 and 3 were similarly structured. As in Study 2, participants reported to the lab one at a time. Upon each participant’s arrival, an experimenter seated the participant next to the confederate and instructed both parties to read and sign an informed consent form. The participant and confederate were then escorted to a private room to begin the computerized tasks. Within the room, two chairs were positioned at computers on opposite sides of a table, such that participants and confederates faced one another when seated.

Before providing instructions, the experimenter informed the participant and confederate that they had 12 Facebook friends in common<sup>4</sup>. This was done to give participants the impression that that their social networks overlapped with the confederates.’ The hope was that participants would perceive the potential for future interaction with the confederate and realize that their monetary allocation in the Dictator Game could have consequences outside of the experiment.

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<sup>4</sup> Participants were required to have a Facebook account in order to participate in this study.

After explaining the rules of the Dictator Game, the experimenter informed both parties that there would be a one-in-six chance of receiving actual monetary payouts in accordance with the Dictator's decision. In addition, the participant and confederate were told that the Dictator's decision would only be revealed in the event that actual monetary payouts were made. This was done to mitigate the temptation to: (1) allocate money in a purely self-interested manner, knowing that the recipient *would not* become aware of how they were treated in the Dictator Game, and (2) allocate of money in complete fairness, knowing that the recipient *would* become aware of how they were treated in the Dictator Game.

Following the instructions, the participant began completing the two computerized tasks while the confederate ostensibly did the same. Because the participant's and confederate's computers faced in opposite directions, both parties responded privately. As the computerized tasks were being completed, the confederate occasionally drew attention to the products used in the status manipulation (e.g., male confederates fiddled with their keys, female confederates reached into their handbag for chapstick), as was done in Study 2. Participants were debriefed in the final screen of the last computerized task. Following the debriefing, an experimenter rolled a die; participants were instructed to return to the lab to pick up their payment only in the event that the die landed on a six.

*Manipulation Check.* Two video recordings were taken of each confederate, one in each experimental condition, to ensure that the effectiveness of the status manipulation was not due to systematic differences in the confederates' behavior. In each video, I occluded view of the confederate's apparel so that only the confederate's behavior could affect perceptions of status. A separate sample of six third-party raters (3 men, 3 women) evaluated each confederate across seven traits, including the key variable of interest—

perceived social status. Results of a paired samples  $t$ -test indicate that perceptions of the confederates' status did not differ across experimental condition after the influence of the confederates' apparel was removed,  $t(29) = 1.06, p = .30$ .

## **Results**

### ***Status Perceptions of Conspicuous Consumers***

An Independent  $t$ -test was conducted to evaluate whether confederates were perceived to be higher status when conspicuously consuming than when not. Supporting Prediction 3.1, confederates were rated as higher status when assigned to the conspicuous condition ( $M = 4.70, SE = .06$ ) than inconspicuous condition ( $M = 4.33, SE = .06$ ),  $t(369) = 4.40, p < .001$ . As revealed by a 2x2 ANOVA, experimental condition (conspicuous vs. inconspicuous) did not interact with dyad type (same-sex vs. opposite-sex),  $F(1, 367) = .47, p = .49$ , indicating that conspicuous consumption increased perceptions of confederates' status in same-sex and opposite-sex dyads.

### ***Affiliation Motivation***

As in Study 2, results did not support the prediction that participants would be more strongly motivated to affiliate with confederates in the conspicuous condition ( $M = 16.64, SE = .23$ ) than inconspicuous condition ( $M = 16.62, SE = .21$ ),  $t(369) = .06, p = .95$ . Unlike Study 2, however, and contrary to Prediction 3.2.1, experimental condition (conspicuous vs. inconspicuous) did not interact with dyad type (same-sex vs. opposite-sex),  $F(1, 367) = .47, p = .50$ . In neither same-sex nor opposite-sex dyads did participants express a differential motivation to affiliate with confederates across condition.

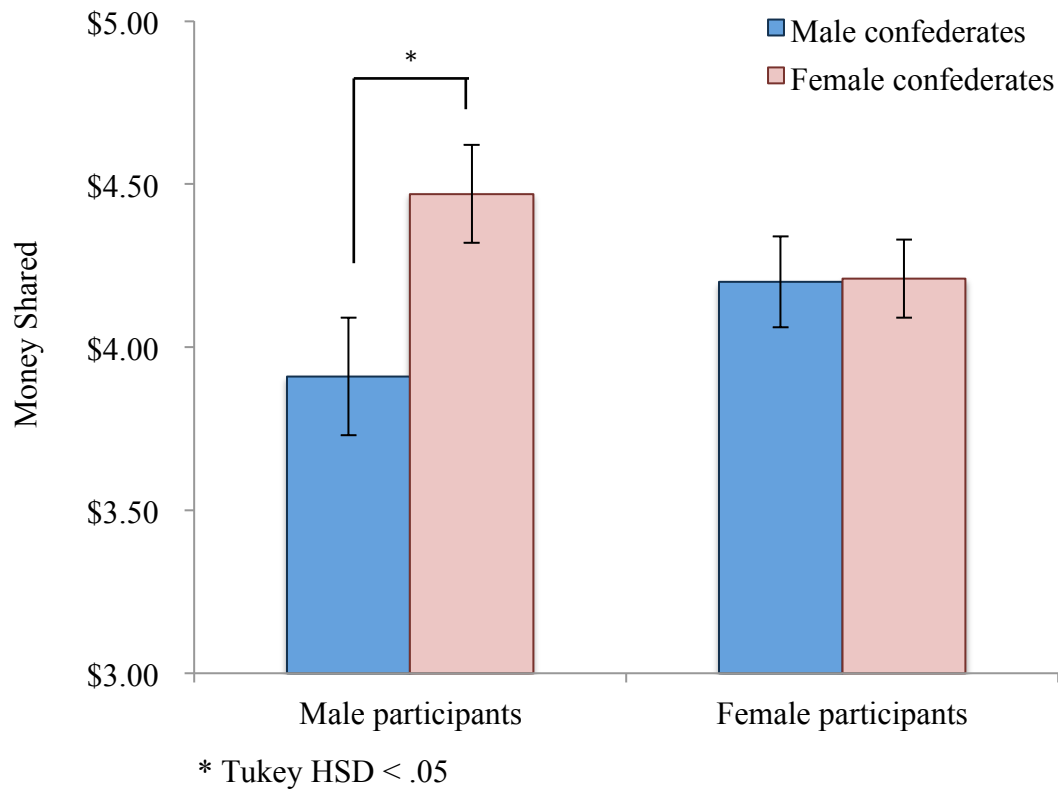
### ***Money Shared with Conspicuous Consumers***

To evaluate whether participants shared more of their monetary allotment in the Dictator Game with confederates who were dressed conspicuously than with those who were not, an Independent  $t$ -test was conducted. In contrast to Prediction 3.3, participants did not differ in the amount of money they shared with confederates in the conspicuous condition ( $M = \$4.24$ ,  $SE = .10$ ) and inconspicuous condition ( $M = \$4.19$ ,  $SE = .10$ ),  $t(369) = .30$ ,  $p = .76$ . Prediction 3.3.1 also failed to receive support; the amount of money participants shared with confederates in the conspicuous and inconspicuous conditions did not differ across same-sex and opposite-sex interactions,  $F(1, 367) = .29$ ,  $p = .59$ .

Exploratory analyses were then conducted to test for sex-specific effects in the amount of money participants shared with confederates across condition. A 2x2x2 ANOVA of participant sex, confederate sex, and experimental condition (conspicuous vs. inconspicuous) revealed a main effect for confederate sex. Participants shared more money with female confederates ( $M = \$4.34$ ,  $SE = .09$ ) than male confederates ( $M = \$4.06$ ,  $SE = .11$ ),  $F(1, 363) = 3.76$ ,  $p = .05$ . This main effect was qualified by two 2-way interactions; the first showed a trend between participant sex and confederate sex,  $F(1, 363) = 3.44$ ,  $p = .06$ . As shown in Figure 11, Tukey HSD comparisons revealed that female participants shared an equal amount of money with male ( $M = \$4.20$ ,  $SE = .14$ ) and female ( $M = \$4.21$ ,  $SE = .12$ ) confederates, but male participants shared more money with female ( $M = \$4.47$ ,  $SE = .15$ ) confederates than male ( $M = \$3.91$ ,  $SE = .18$ ) confederates.

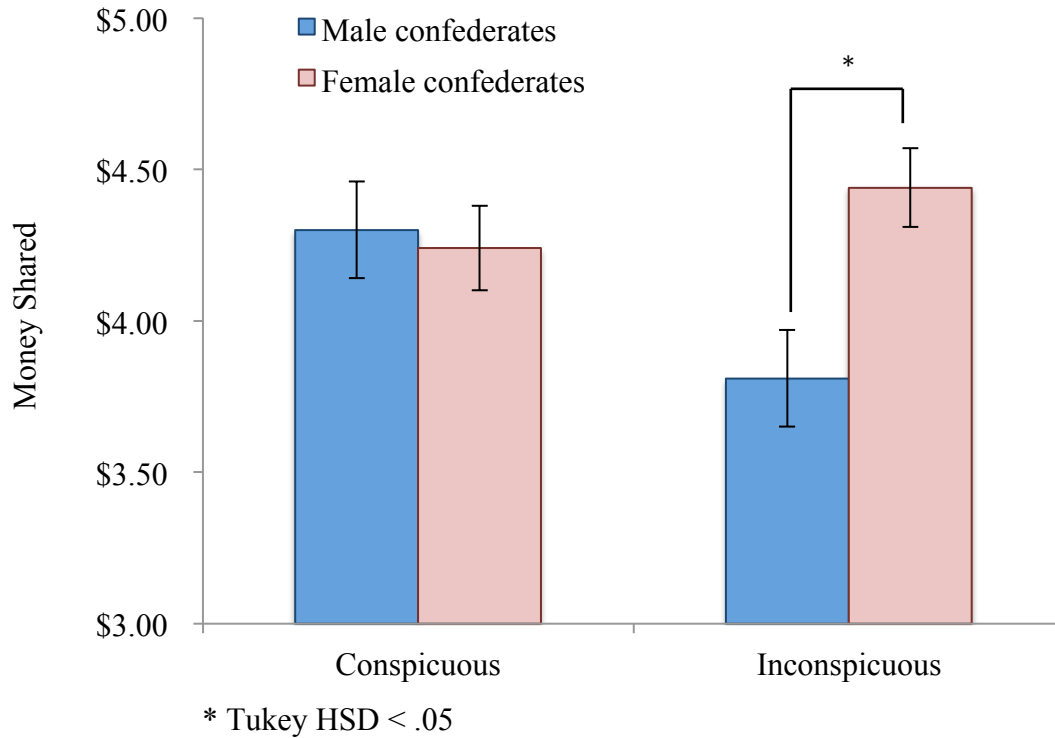


Figure 11: Interaction between Participant Sex and Confederate Sex on Money Shared



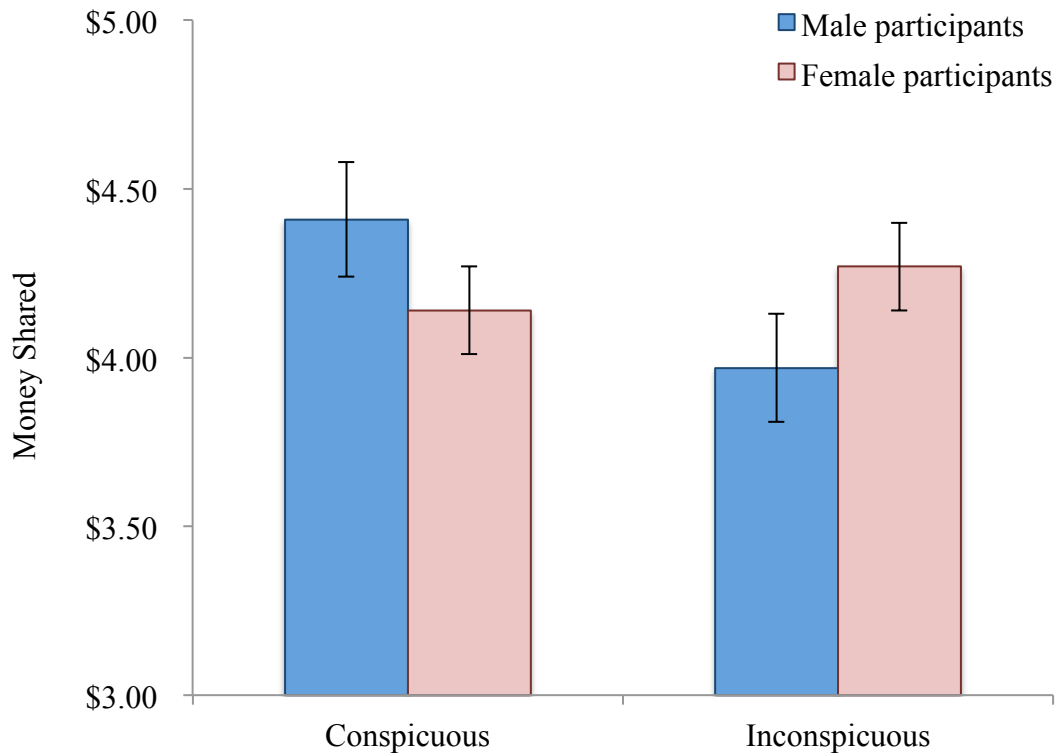
The second 2-way interaction was between confederate sex and experimental condition,  $F(1, 363) = 5.54, p = .02$ . Tukey HSD comparisons showed that participants shared an equal amount of money with male ( $M = \$4.30, SE = .16$ ) and female ( $M = \$4.24, SE = .14$ ) confederates in the conspicuous condition, but participants shared more money with female ( $M = \$4.44, SE = .13$ ) than male ( $M = \$3.81, SE = .16$ ) confederates in the inconspicuous condition (see Figure 12).

Figure 12: Interaction between Confederate Sex and Experimental Condition on Money Shared



Finally, a third 2-way interaction was revealed between participant sex and experimental condition,  $F(1, 363) = 3.76, p = .05$ . Male participants ( $M = \$4.41, SE = .17$ ) shared more money than female participants ( $M = \$4.14, SE = .13$ ) with confederates in the conspicuous condition, but female participants ( $M = \$4.27, SE = .13$ ) shared more money than male participants ( $M = \$3.97, SE = .16$ ) with confederates in the inconspicuous condition. Although the pattern shown in Figure 13 was significant, Tukey HSD comparisons did not reveal any group to be significantly different from another.

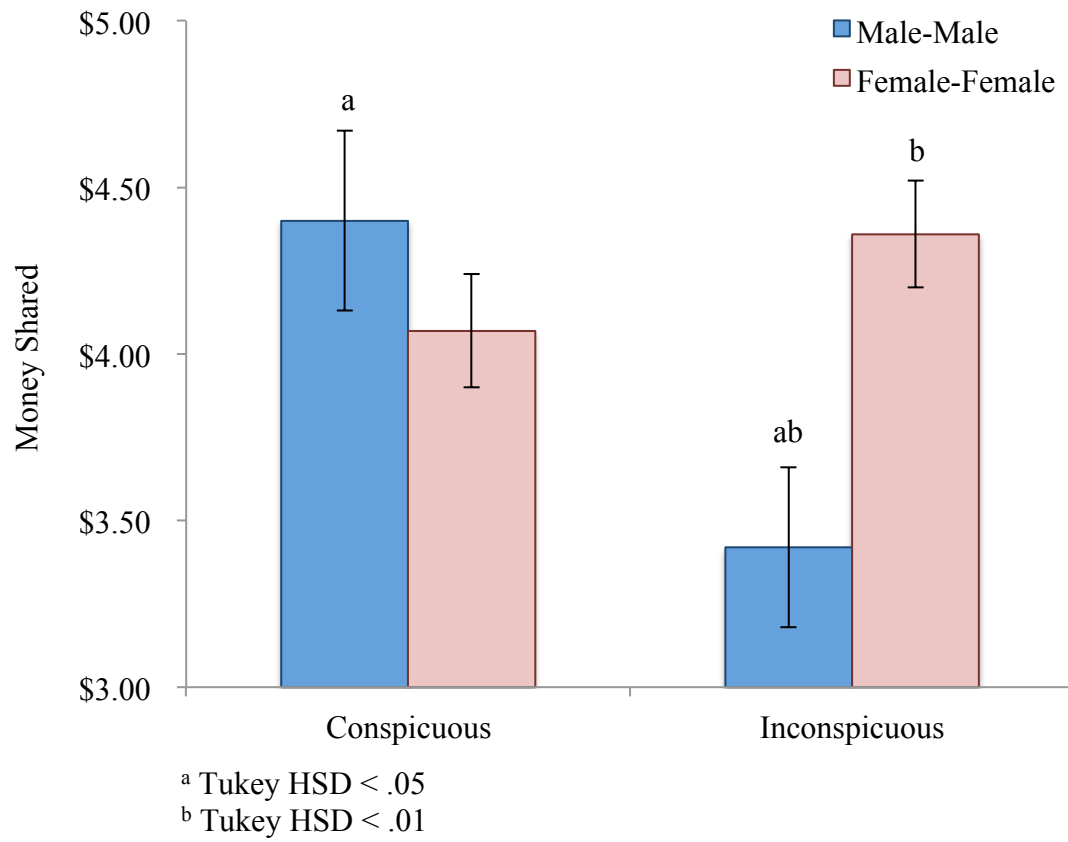
Figure 13: Interaction between Participant Sex and Experimental Condition on Money Shared



The omnibus ANOVA did not reveal a 3-way interaction between participant sex, confederate sex, and experimental condition,  $F(1, 363) = 1.73, p = .19$ ; however, restricting the analysis to same-sex dyads produced a significant result. As revealed by a 2x2 ANOVA, dyad sex (male-male vs. female-female) interacted with experimental condition (conspicuous vs. inconspicuous),  $F(1, 187) = 10.45, p = .001$ . As shown in Figure 14, male participants shared more money with same-sex confederates in the conspicuous condition ( $M = \$4.40, SE = .27$ ) than inconspicuous condition ( $M = \$3.42, SE = .24$ ), whereas female participants did not differ in the amount of money they shared with same-sex confederates in the conspicuous condition ( $M = \$4.07, SE = .17$ ) and inconspicuous condition ( $M = \$4.36, SE = .16$ ). Between sex, male and female

participants did not differ in the amount of money they shared with same-sex confederates in the conspicuous condition, but female participants shared more money than male participants with same-sex confederates in the inconspicuous condition.

Figure 14: Effect of Experimental Condition within Same-Sex Dyads on Money Shared



## Discussion

The results generally failed to support the Study 3 predictions but exploratory analyses revealed several interesting sex-specific effects. I will first summarize the findings as they relate to each of the stated predictions then discuss possible explanations for the sex-specific effects. Afterward, I will conclude with limitations and future directions related to Study 3.

*Status Perceptions of Conspicuous Consumers.* The prediction that confederates would be perceived as higher status in the conspicuous condition than inconspicuous condition received strong support. Unlike Study 2, which showed this effect only in same-sex interactions, in Study 3 conspicuous consumption increased perceptions of confederates' status in same-sex and opposite-sex interactions. One possibility to account for the robustness of the effect found in Study 3 relative to Study 2 is an absence of competing status cues in Study 3. In Study 3, participants and confederates did not engage in a discussion as they had in Study 2; they merely completed the computerized tasks in the presence of one another. The absence of verbal interaction likely reduced the number of competing status cues, causing the confederates' apparel to influence perceptions of status to a greater degree.

*Affiliation Motivation.* Results failed to support the prediction that participants would be more strongly motivated to affiliate with confederates who were conspicuously consuming than those who were not. The follow-up interaction prediction also failed to receive support; in neither same-sex nor opposite-sex interactions did participants express a stronger desire to affiliate with confederates in the conspicuous condition than inconspicuous condition. Once again, the inconsistency between these findings and the analogous findings in Study 2 may be the result of the different levels of social interaction between the two studies. The psychological mechanisms that motivate

affiliation may require a certain amount of information regarding another's interpersonal nature (e.g., perceptions of his or her cooperativeness) to become activated. If that is the case, the lack of verbal interaction in Study 2 may not have provided participants with enough information about the confederates to cross that threshold.

*Money Shared with Conspicuous Consumers.* Despite the effectiveness of the status manipulation, results also failed to support the two predictions that (1) participants would share more of their monetary allotment in the Dictator Game with confederates dressed conspicuously than inconspicuously and (2) that this effect would be stronger in same-sex interactions than opposite-sex interactions. These null results may have resulted from participants' uniform motivation to affiliate with confederates across condition. If one function of resource bestowal is to increase the likelihood of affiliating with another, participants may not have shared a differential amount of money with confederates across condition because they were not differentially motivated to affiliate with confederates across condition.

The results also indicated that countervailing sex-specific interactions nullified the predicted effects. Men shared more money with confederates in the conspicuous condition than inconspicuous condition, whereas women did not significantly differ in the amount of money they shared with confederates across condition (if anything, women shared less with confederates in the conspicuous condition than inconspicuous condition; see Figure 13). These effects were especially strong in same-sex interactions (see Figure 14). Thus, conspicuous consumption increased men's generosity (particularly toward other men) but it did not affect women's generosity.

It is interesting that men shared more resources with high status (i.e., conspicuously consuming) individuals of the same sex than women did, especially considering how strongly resource holdings influence a man's desirability as a mate

(Buss, 1989). A man who gives resources to a same-sex rival, particularly one who has higher status than himself, increases the likelihood that his rival will gain access to a disproportionate number of women, leaving fewer mating opportunities for himself (Symons, 1979). One of two possibilities may explain this unexpected finding. The first examines the conferral of resources from an honest signaling perspective. An act that intentionally benefits a rival at a cost to oneself functions as a handicap (Zahavi, 1975); it signals to others one's capability to overcome an increased challenge. Thus, in the current study, men might have been communicating their economic formidability by conferring resources on those who posed the greatest threat (i.e., high status men).

Alternatively, conspicuous consumption may have increased men's generosity more so than women's because conspicuous consumption signals a type of status that is particularly relevant to men—economic status (Buss, 1989). As discussed in Chapter 2, the expenditure of large sums of money is intrinsic to the purchase of luxury goods. Therefore, conspicuous consumption directly signals one's economic standing. To the extent that the conferral of resources increases the likelihood of benefiting from another's economic status in the future, men should be especially motivated to treat those of high economic status favorably. In contrast, economic status may be less of a concern for women than other types of status that are less directly signaled through conspicuous consumption (e.g., social status or popularity). Consequently, women likely perceived fewer benefits than men from winning the favor of conspicuous consumers.

*Limitations and Future Directions.* An important limitation of Study 3 was the sole use of conspicuous consumption as the status manipulation. As previously mentioned, conspicuous consumption may engage representations for particular types of status (e.g., economic status) more so than others (e.g., social status). In the current study, conspicuous consumption did not trigger generosity among women potentially because it

signaled a type of status that is largely peripheral to women's social relationships. I recommend that future studies manipulate status through a variety of means to increase the likelihood of activating status-related psychological mechanisms in both sexes. For instance, among college student samples, Greek letters symbolizing membership in a popular fraternity or sorority would likely increase perceptions of social status. If the present study had used this manipulation in addition to conspicuous consumption, perhaps both men and women would have shown greater generosity toward high status confederates.

## **CHAPTER CONCLUSIONS**

Material resources benefit men and women through a variety of avenues that range from the satisfaction of nutritional demands to the ability to barter for valuable goods. Prior research has shown that high status individuals are afforded greater access to material resources than low status individuals (Nelissen & Meijers, 2011; see Cummins, 2006 and Henrich & Gil-White, 2001 for a review), a benefit that is especially valuable to women with dependent children (Ellison, 2003; Langley-Evans & Carrington, 2006; Rasmussen, 1992). In spite of the added benefit to women, the extant research exploring access to resources largely ignores the possibility of sex-specific effects. Thus, the purpose of Study 3 was to substantiate previous research by showing access to resources as a status benefit in both men and women.

Contrary to the primary predictions of Study 3, conspicuous consumption did not affect the allotment of material resources in a general sense. It did, however, differentially affect men and women's generosity. Men shared a greater amount of their monetary allotment in the Dictator Game with conspicuous consumers, particularly those of the same sex, whereas women showed no effect. Future research is needed to



determine whether this sex difference was due to the particular type of status signaled by conspicuous consumption (e.g., economic status) or to women's complete nonuse of resource conferral as a means of ingratiating with high status individuals.

## **Chapter 4: General Discussion**

The current research was designed to (1) test the effectiveness of conspicuous consumption as a status-enhancement tactic and (2) examine access to material resources as an interpersonal benefit that incentivizes such status striving behavior. As summarized in Table 3, results of all three studies indicated that conspicuous consumption increases perceptions of status in both men and women, confirming its effectiveness as a status-enhancement tactic. In addition, Study 1 revealed correlations between several status-related individual difference variables and conspicuous consumption, further supporting its status signaling function.

Findings from Study 3 showed access to resources to be a less straightforward status benefit than was originally thought (Cummins, 2006; Henrich & Gil-White, 2001). Generally speaking, participants did not preferentially give material resources to those displaying cues of high status. Only men shared a greater amount of their monetary allotment in the Dictator Game with conspicuous consumers and this effect was primarily limited to their interaction with other men. The possibility that the sex-specificity of this effect was due to the particular type of status signaled by conspicuous consumption (i.e., economic status) warrants further exploration.

Table 3: Summary of Empirical Support for Study Predictions

**Study 1**

Prediction	Result
1.1: Conspicuous consumption will increase perceptions of status	Supported
1.2: Status-related individual difference variables will correlate with conspicuous consumption	Partial support (SES not correlated)
1.3: Individual differences in narcissism will correlate with conspicuous consumption	Supported
1.4: Women will be the target of both sexes' conspicuous consumption	Supported

**Study 2**

Prediction	Result
2.1: Conspicuous consumption will increase perceptions of status	Partial support (same-sex dyads only)
2.2: Conspicuous consumption will increase affiliation motivation	Partial support (same-sex dyads only)

**Study 3**

Prediction	Result
3.1: Conspicuous consumption will increase perceptions of status	Supported
3.2: Conspicuous consumption will increase affiliation motivation	Not supported
3.3: Conspicuous consumption will increase money shared in Dictator Game	Partial support (male same-sex dyads only)

## **PATHWAYS OF OBTAINING RESOURCES**

A singular concept of status does not harmonize well with human evolved psychology. Psychological mechanisms were not designed to respond to status cues in a domain-general manner. Rather, cues associated with different types of status activate distinct psychological circuits. One of the most commonly made status distinctions is between dominance and prestige; the key difference being the primary method used to exert influence over others (Henrich & Gil-White, 2001). The former involves the use of force, whereas the latter involves the use of persuasion (Henrich & Gil-White, 2001). Thus, social influence is *taken* by dominant individuals and *given* to prestigious individuals.

Resources can be obtained through the same two avenues—they can be taken or given. As with social influence, resources are more freely conferred upon prestigious individuals than dominant individuals (Henrich & Gil-White, 2001). Dominant individuals receive access to resources through the inaction of others. Subordinates “look the other way,” which enables dominant individuals to take a disproportionate share of resources with reduced regard for social repercussion (Cummins, 1999; Eckel, Fatas, & Wilson, 2010; Mealey, Daoood, & Krage, 2006). Thus, if conspicuous consumption affects perceptions of dominance-based status more so than prestige-based status, resources may not be actively conferred; instead, they may be acquired through others’ reluctance to enforce regulations ensuring the equitable division of resources. Future research should test for this possibility by investigating the degree to which conspicuous consumption influences perceptions of dominance-based status and prestige-based status, bearing in mind that the effect may differ between men and women.

## **FUTURE DIRECTIONS**

In addition to testing the pathways by which high status individuals receive prioritized access to resources, future research is needed to identify other benefits associated with status, particularly in women. Such benefits may include access to better quality mates, the ability to more effectively deter mate poachers, and the reliable assistance of others in times of need. Empirical work is also needed to determine whether subdivisions of status, such as dominance and prestige, apply to women's social hierarchies as well as they do to men's as some benefits may be primarily associated with dominance-based status (e.g., reproductive suppression of subordinates; Barrett, Abbott, & George, 1990) and prestige-based status (e.g., the ability to control the reputations of oneself and others).

Future studies should also explore the downstream effects of a woman's status on her offspring as these may provide the ultimate motivation for women's status striving. As previously mentioned, the children of high status women benefit from their mothers' prioritized access to material resources (Ellison, 2003; Langley-Evans & Carrington, 2006; Rasmussen, 1992). Like their mothers, they may also be less subject to social regulation or awarded privileges typically reserved for older children (e.g., permission to accompany elders on hunting expeditions). Through the realization of these benefits, the offspring of high status women may secure a more favorable position in the mating market.

## **CONCLUSIONS**

The current research is the first to apply an evolutionarily informed perspective to the study of women's status striving motivations. Although access to resources was not identified as a status benefit among women, it and many others remain to be tested using experimental manipulations that activate perceptions of various types of status. In

addition, a sex-specific approach to the study of status hierarchies will generate more nuanced findings than those currently in existence as the strategies and incentives of attaining high status differ between the sexes. Finally, of particular interest to the luxury market, the studies above identified several individual difference variables that predict conspicuous consumption and established conspicuous consumption as an effective status-enhancement tactic in both men and women. The continued use of the functional perspective that was applied to this body of research is expected to provide luxury corporations with invaluable information regarding the evolved psychology of their target markets well into the future.

## **Appendix A: Instructional Compliance Check**

In order to facilitate our research on consumer behavior, we are interested in knowing certain facets about you. Specifically, we are interested in whether you actually take the time to read directions. In order to demonstrate that you have read the directions, do not respond to the answer choices below, and instead write "apple" in the text box next to the answer choice, Other.

- ☐ Fine dining
- ☐ Reading magazines
- ☐ Going to the movies
- ☐ Athletic activities
- ☐ Shopping
- ☐ Watching TV
- ☐ Cooking
- ☐ Other: \_\_\_\_\_

## **Appendix B: Conspicuous Consumption Behavior Scale**

**1. How much enjoyment would you receive by being seen owning expensive merchandise?**

1	2	3	4	5	6	7
extreme displeasure			neutral	extreme enjoyment		

**2. I own expensive products to impress others.**

1	2	3	4	5	6	7
strongly disagree		neither agree nor disagree			strongly agree	

**3. How frequently do you display expensive products you own with the goal of impressing others?**

1 – never

2 – very seldom

3 – about once every 2-3 months

4 – about once a month

5 – about once every 2 weeks

6 – about once a week

7 – several times per week

8 – nearly every day

9 – at least once a day



**4. Whom do you most often *try to impress* by owning nice things?**

- \_\_\_\_\_ Female strangers
- \_\_\_\_\_ Female friends
- \_\_\_\_\_ Male strangers
- \_\_\_\_\_ Male friends
- \_\_\_\_\_ Potential romantic partners
- \_\_\_\_\_ Actual romantic partners

**5. Whom do you most often *notice* owning nice things?**

- \_\_\_\_\_ Female strangers
- \_\_\_\_\_ Female friends
- \_\_\_\_\_ Male strangers
- \_\_\_\_\_ Male friends
- \_\_\_\_\_ Potential romantic partners
- \_\_\_\_\_ Actual romantic partners

## Appendix C: First Impressions Survey

For each trait listed below, please rate how your interaction partner compares to *other people of the same age* using the following scale. Higher scores indicate that your interaction partner demonstrates that particular trait much *more* than the average person; lower scores indicate that your interaction partner demonstrates that particular trait much *less* than the average person.

Example: **Athletic**

1	2	3	4	5	6	7
Interaction partner is much <i>less</i> athletic than others my age			Interaction partner is equally athletic with others my age		Interaction partner is much <i>more</i> athletic than others my age	

### 1. Friendliness

1	2	3	4	5	6	7
---	---	---	---	---	---	---

### 2. Social Status

1	2	3	4	5	6	7
---	---	---	---	---	---	---

### 3. Manipulativeness

1	2	3	4	5	6	7
---	---	---	---	---	---	---

### 4. Wealth

1	2	3	4	5	6	7
---	---	---	---	---	---	---

**5. Intelligence**

1                      2                      3                      4                      5                      6                      7

**6. Popularity**

1                      2                      3                      4                      5                      6                      7

**7. Trustworthiness**

1                      2                      3                      4                      5                      6                      7

**8. Physical Attractiveness**

1                      2                      3                      4                      5                      6                      7

**9. Responsibility**

1                      2                      3                      4                      5                      6                      7

**10. Selfishness**

1                      2                      3                      4                      5                      6                      7

## Appendix D: Affiliation Motivation Questions

**1. I would like to be friends with my interaction partner.**

1	2	3	4	5	6	7
strongly disagree		neither agree nor disagree			strongly agree	

**2. I admire my interaction partner.**

1	2	3	4	5	6	7
strongly disagree		neither agree nor disagree			strongly agree	

**3. Being friends with my interaction partner would increase my social status.**

1	2	3	4	5	6	7
strongly disagree		neither agree nor disagree			strongly agree	

**4. I can learn how to be more popular by spending time with my interaction partner.**

1	2	3	4	5	6	7
strongly disagree		neither agree nor disagree			strongly agree	

## Appendix E: Dictator Game

### Dictator Game

**\*\* You have been assigned the role of the Dictator \*\***

As the Dictator, please indicate how much of \$9.00 you would like to give to the Receiver. The amount you decide to share must be in whole dollar amounts.

I would like to give the Receiver:

- ☐ \$0.00 (and keep \$9.00)
- ☐ \$1.00 (and keep \$8.00)
- ☐ \$2.00 (and keep \$7.00)
- ☐ \$3.00 (and keep \$6.00)
- ☐ \$4.00 (and keep \$5.00)
- ☐ \$5.00 (and keep \$4.00)
- ☐ \$6.00 (and keep \$3.00)
- ☐ \$7.00 (and keep \$2.00)
- ☐ \$8.00 (and keep \$1.00)
- ☐ \$9.00 (and keep \$0.00)

## References

- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy White women. *Health Psychology, 19*, 586-592.
- Alexander, R. D. (1989). Evolution of the human psyche. In P. Mellars, & C. Stringer (Eds.), *The human revolution: Behavioral and biological perspectives on the origins of modern humans* (pp. 455-513). Princeton: Princeton University Press.
- Alpizar, F., Carlsson, F., & Johansson-Stenman, O. (2005). How much do we care about absolute versus relative income and consumption? *Journal of Economic Behavior & Organization, 56*, 405-421.
- Anderson, C., & Kilduff, G. J. (2009). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology, 96*, 491-503.
- Andersson, F. W. (2008). Is concern for relative consumption a function of relative consumption? *Journal of Socio-Economics, 37*, 353-364.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism-popularity link at zero acquaintance. *Journal of Personality and Social Psychology, 98*, 132-145.
- Barrett, J., Abbott, D. H., & George, L. M. (1990). Extension of reproductive suppression by pheromonal cues in subordinate female marmoset monkeys, *Callithrix jacchus*. *J. Reprod. Fert., 90*, 441-418.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.
- Berger, J., Cohen, B. P., & Zelditch, M., Jr. (1972). Status characteristics and social interaction. *American Sociological Review, 37*, 241-255.
- Bickman, L. (1971). The effect of social status on the honesty of others. *The Journal of Social Psychology, 85*, 87-92.
- Boyce, T. W. (2004). Social stratification, health, and violence in the very young. In J. Devine, J. Gilligan, K. A. Miczek, S. Rashid, & D. Pfaff (Eds.), *Youth violence: Scientific approaches to prevention*. (pp. 47-68). New York: New York Academy of Sciences.
- Boyce, C. J., Brown, G. D. A., & Moore, S. C. (2010). Money and happiness: Rank of income, not income, affects life satisfaction. *Psychological Science, 21*, 471-475.
- Buss, D. M. (1981). Sex differences in the evaluation and performance of dominant acts. *Journal of Personality and Social Psychology, 40*, 147-154.

- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral & Brain Sciences*, 12, 1-49.
- Buss, D. M. (2004). *Evolutionary psychology: The new science of the mind* (2nd ed.). Boston, MA: Allyn & Bacon.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: A contextual evolutionary analysis of human mating. *Psychological Review*, 100, 204-232.
- Buhrmester, M., Kwang, T., & Gosling, S. D. Amazon's Mechanical Turk: A new source of inexpensive, yet high quality, data? *Perspectives on Psychological Science*, 6, 3-5.
- Campbell, A. (1999). Staying alive: Evolution, culture, and women's intra-sexual aggression. *Behavioral and Brain Sciences*, 22, 203-252.
- Carter, T. J., & Gilovich, T. (2010). The relative relativity of material and experiential purchases. *Journal of Personality and Social Psychology*, 98, 146-159.
- Chagnon, N. A. (1992). *Yanomamo*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Chao, A., & Schor, J. B. (1998). Empirical tests of status consumption: Evidence from women's cosmetics. *Journal of Economic Psychology*, 19, 107-131.
- Cohen, S., Alper, C. M., Adler, N., Doyle, W. J., Treanor, J. J., & Turner, R. B. (2008). Objective and subjective socioeconomic status and susceptibility to the common cold. *Health Psychology*, 27, 268-274.
- Cosmides, L., & Tooby, J. (1992). Cognitive adaptations for social exchange. In *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, J. Barkow, L. Cosmides, and J. Tooby, (Eds.). New York: Oxford University Press.
- Cummins, D. D. (1999). Cheater detection is modified by social rank: The impact of dominance on the evolution of cognitive functions. *Evolution and Human Behavior*, 20, 229-248.
- Cummins, D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676-697). Hoboken, NJ: John Wiley & Sons Inc.
- DeWall, C. N., & Maner, J. K. (2008). High status men (but not women) capture the eye of the beholder. *Evolutionary Psychology*, 6, 328-341.
- Dijkstra, J. K., Cillessen, A. H. N., Lindenberg, S., & Veenstra, R. (2010). Basking in reflected glory and its limits: Why adolescents hang out with popular peers. *Journal of Research on Adolescence*, 20, 942-958.
- Eckel, C. C., Fatas, E., & Wilson, R. (2010). Cooperation and status in organizations. *Journal of Public Economic Theory*, 12, 737-762.

- Ellison, P. T. (2003). Energetics and reproductive effort. *American Journal of Human Biology*, 15, 342-351.
- Emmons, R. A. (1984). Factor analysis and construct validity of the narcissistic personality inventory. *Journal of Personality Assessment*, 48, 291-300.
- Faley, T., & Tedeschi, J. T. (1971). Status and reactions to threats. *Journal of Personality and Social Psychology*, 17, 192-199.
- Flinn, M. V., Geary, D. C., & Ward, C. V. (2005). Ecological dominance, social competition, and coalitionary arms races: Why humans evolved extraordinary intelligence. *Evolution and Human Behavior*, 26, 10-46.
- Frank, R. H. (1999). *Luxury fever: Why money fails to satisfy in an era of excess*. The Free Press: New York.
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, 23, 675-687.
- Gilbert, D. (1998). *The American class structure*. New York: Wadsworth Publishing.
- Godoy, R., Reyes-Garcia, V., Huanca, T., Leonard, W. R., McDade, T., Tanner, S., et al. (2007). Signaling by consumption in a native Amazonian society. *Evolution and Human Behavior*, 28, 124-134.
- Griskevicius, V., Tybur, J. M., Ackerman, J. M., Delton, A. W., Robertson, T. E., & White, A. E. (2012). The financial consequences of too many men: Sex ratio effects on saving, borrowing, and spending. *Journal of Personality and Social Psychology*, 102, 69-80.
- Griskevicius, V., Tybur, J. M., Sundie, J. M., Cialdini, R. B., Miller, G. F., & Kenrick, D. T. (2007). Blatant benevolence and conspicuous consumption: When romantic motives elicit strategic costly signals. *Journal of Personality and Social Psychology*, 93, 85-102.
- Heaney, J., Goldsmith, R. E., & Jusoh, W. J. W. (2005). Status consumption among Malaysian consumers: Exploring its relationships with materialism and attention-to-social-comparison-information. *Journal of International Consumer Marketing*, 17, 83-98.
- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, 22, 165-196.
- Hill, K., & Hurtado, A. M. (1996). *Ache life history: The ecology and demography of a foraging people*. New York: Aldine de Gruyter.
- Hill, S. E., & Buss, D. M. (2006). Envy and positional bias in the evolutionary psychology of management. *Managerial and Decision Economics*, 27, 131-143.



- Hrdy, S. B. (1999). *Mother nature: Maternal instincts and how they shape the human species*. New York: Ballantine Books.
- Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: MIT Press.
- Kaufman, W. C. (1957). Status, authoritarianism, and anti-Semitism. *The American Journal of Sociology*, 62, 379-382.
- Kenrick, D. T., Sadalla, E. K., Groth, G., & Trost, M. R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. *Journal of Personality*, 58, 97-116.
- Kraus, M. W., & Keltner, K. (2009). Signs of socioeconomic status: A thin-slicing approach. *Psychological Science*, 20, 99-106.
- Langley-Evans, S. C., & Carrington, L. J. (2006). Diet and the developing immune system. *Lupus*, 15, 746-752.
- Larsen, K. S., Triplett, J. S., Brant, W. D., & Langenberg, D. (1979). Collaborator status, subject characteristics and conformity in the Asch paradigm. *Journal of Social Psychology*, 108, 259-263.
- Lassek, W. D., & Gaulin, S. J. C. (2009). Costs and benefits of fat-free muscle mass in men: Relationship to mating success, dietary requirements, and native immunity. *Evolution and Human Behavior*, 30, 322-328.
- Lee, J., & Shrum, L. J. (2012). Conspicuous consumption versus charitable behavior in response to social exclusion: A differential needs explanation. *Journal of Consumer Research*, 1-17.
- Lens, I., Driesmans, K., Pandelaere, M., & Janssens, K. (2012). Would male conspicuous consumption capture the female eye? Menstrual cycle effects on women's attention to status products. *Journal of Experimental Social Psychology*, 48, 346-349.
- Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology*, 82, 947-955.
- Marcoux, J., Filiatrault, P., & Chéron, E. (1997). The attitudes underlying preferences of young urban educated Polish consumers towards products made in Western countries. *Journal of International Consumer Marketing*, 9, 5-29.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2010). Social exclusion causes people to spend and consume strategically in the service of affiliation. *Journal of Consumer Research*, 37, 902-919.
- Mealey, L., Daood, C., & Krage, M. (1996). Enhanced memory for faces of cheaters. *Ethology and Sociobiology*, 17, 119-128.

- Mendelson, T., Thurston, R. C., & Kubzansky, L. D. (2008). Affective and cardiovascular effects of experimentally-induced social status. *Health Psychology, 27*, 482-489.
- Miller, G. (2009). *Spent: Sex, evolution, and consumer behavior*. New York: Viking.
- Nelissen, R. M. A., & Meijers, M. H. C. (2011). Social benefits of luxury brands as costly signals of wealth and status. *Evolution and Human Behavior, 32*, 343-355.
- Nicolao, J., Irwin J. R., & Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research, 36*, 188-198.
- Okonkwo, U. (2007). *Luxury Fashion Branding*. Hampshire: Palgrave Macmillan.
- Ostrove, J. M., Adler, N. E., Kuppermann, M., & Washington, A. E. (2000). Objective and subjective assessments of socioeconomic status and their relationship to self-rated health in an ethnically diverse sample of pregnant women. *Health Psychology, 19*, 613-618.
- Pawlowski, B., & Jasienska, G. (2008). Women's body morphology and preferences for sexual partners' characteristics. *Evolution and Human Behavior, 29*, 19-25.
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology, 95*, 1113-1135.
- Pettit, N. C., & Sivanathan, N. (2011). The plastic trap: Self-threat drives credit usage and status consumption. *Social Psychological and Personality Science, 2*, 146-153.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.
- Pusey, A., Williams, J., & Goodall, J. (1997). The influence of dominance rank on the reproductive success of female chimpanzees. *Science, 277*, 828-831.
- Rasmussen, K. M. (1992). The influence of maternal nutrition on lactation. *Annual Review of Nutrition, 12*, 103-117.
- Ratcliff, N. J., Hugenberg, K., Shriver, E. R., & Bernstein, M. J. (2011). The allure of status: High-status targets are privileged in face processing and memory. *Personality and Social Psychology Bulletin, 37*, 1003-1015.
- Ridley, M. (1993). *The red queen: Sex and evolution in human nature*. New York: Penguin.
- Roney, J. R. (2003). Effects of visual exposure to the opposite sex: Cognitive aspects of mate attraction in human males. *Personality and Social Psychology Bulletin, 29*, 393-404.

- Roney, J. R., Mahler, S. V., & Maestripieri, D. (2003). Behavioral and hormonal responses of men to brief interactions with women. *Evolution and Human Behavior*, 24, 365-375.
- Saad, G., & Gill, T. (2005). Sex-specific triggers of envy: An evolutionary perspective. *Human Behavior and Evolution Society Annual Conference*, Austin, TX.
- Saad, G., & Vongas, J. (2009). The effect of conspicuous consumption on men's testosterone levels. *Organizational Behavior and Human Decision Processes*, 110, 80-92.
- Schmitt, D. P., & Buss, D. M. (2001). Human mate poaching: Tactics and temptations for infiltrating existing mateships. *Journal of Personality and Social Psychology*, 80, 894-917.
- Sidanius, J., Levin, S., & Pratto, F. (1996). Consensual social dominance orientation and its correlates within the hierarchical structure of American society. *International Journal of Intercultural Relations*, 20, 385-408.
- Silverstein, M. J., & Fiske, N. (2003). *Trading up: The new American luxury*. New York: Portfolio.
- Simmel, G. (1957, May). Fashion. *American Journal of Sociology*, 62, 541-558. (Original work published 1895)
- Sundie, J. M., Kenrick, D. T., Griskevicius, V., Tybur, J. M., Vohs, K. D., & Beal, D. J. (2011). Peacocks, porsches, and Thorstein Veblen: Conspicuous consumption as a sexual signaling system. *Journal of Personality and Social Psychology*, 100, 664-680.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Tooby, J., & Cosmides, L. (1996). Friendship and the banker's paradox: Other pathways to the evolution of adaptations for altruism. *Evolution of Social Behaviour Patterns in Primates and Man. Proceedings of the British Academy*, 88, 119-143.
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.) *Sexual selection and the descent of man: 1871-1971* (pp. 136-179). Chicago: Aldine.
- Van Boven, L. (2005). Experientialism, materialism, and the pursuit of happiness. *Review of General Psychology*, 9, 132-142.
- Van Boven, L., Campbell, M. C., & Gilovich, T. (2010). Stigmatizing materialism: On stereotypes and impressions of materialistic and experiential pursuits. *Personality and Social Psychology Bulletin*, 36, 551-563.
- Van den Bergh, B., Dewitte, S., & Warlop, L. (2008). Bikinis instigate generalized impatience in intertemporal choice. *Journal of Consumer Behavior*, 35, 85-97.

- Van der Vegt, G. S., Bunderson, J. S., & Oosterhof, A. (2006). Expertness diversity and interpersonal helping in teams: Why those who need the most help end up getting the least. *Academy of Management Journal*, 49, 877-893.
- Van Kempen, L. (2003). Fooling the eye of the beholder: Deceptive status signaling among the poor in developing countries. *Journal of International Development*, 15, 157-177.
- Van Kleef, G. A., Homan, A. C., Finkenauer, C., Gündemir, S., & Stamkou, E. (2011). Breaking the rules to rise to power: How norm violators gain power in the eyes of others. *Social Psychological and Personality Science*, 2, 500-507.
- Veblen, T. (1994). *The theory of the leisure class*. New York: Dover. (Original work published 1899)
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.) *Sexual selection and the descent of man: 1871-1971* (pp. 136-179). Chicago: Aldine.
- Weisfeld, G. E., & Beresford, J. M. (1982). Erectness of posture as an indicator of dominance or success in humans. *Motivation and Emotion*, 6, 113-131.
- Wilson, M., & Daly, M. (2004). Do pretty women inspire men to discount the future? *Proceedings of the Royal Society London*, 271B(Suppl. 4), 177-179.
- Zahavi, A. (1975). Mate selection: A selection for a handicap. *Journal of Theoretical Biology*, 53, 205-214.
- Zitek, E. M., & Tiedens, L. Z. (2012). The fluency of social hierarchy: The ease with which hierarchical relationships are seen, remembered, learned, and liked. *Journal of Personality and Social Psychology*, 102, 98-115.